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The Botanic Garden;

Consisting of

Highly finished Representations

OF HARDY

ORNAMENTAL FLOWERING

PLANTS,

CULTIVATED IN GREAT BRITAIN;

WITH

Their Classification, History, Culture,

AND

OTHER INTERESTING INFORMATION.

BY

B. MAUND, F.L.S.

Vol. VII

LONDON:

SIMPKIN AND MARSHALL, STATIONERS HALL COURT,

AND

SHERWOOD AND Co. PATERNOSTER ROW.

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THEIR NAMES, CLASSES, ORDERS, HISTORY, QUALITIES, CULTURE,
AND PHYSIOLOGICAL OBSERVATIONS.

BY

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VOL. IV.

"Not a tree,
A plant, a leaf, a blossom, but contains
A folio volume. We may read and read,
And read again, and still find something new,
Something to please, and something to instruct."

HURDIS.

London:

SIMPKIN AND MARSHALL, STATIONERS' HALL COURT:
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1831—2.

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PREFACE.

The close of another volume of our labours affords us an opportunity of again meeting our friends in a preface. Our work has now spread over eight by-gone years, and we cannot affect insensibility in congratulating, not only ourselves, but the hundreds who have felt so warm an interest in the Botanic Garden, that its success is still unabated. Its circulation has increased with its continuance; its friends, of course, with its circulation; and based, as it is, on economy, and, perhaps, it may be allowed us to add, on changeless and careful execution, it may reasonably be anticipated that the sphere of its popularity will progressively enlarge.

There are very few works that, in progress of time, do not, for want of materials, exhaust or diminish the pleasure which they originally excited: our sources, on the contrary, become richer and richer; our materials increase as we proceed. The immeasurable supplies which the blessings of peace have opened to us appear inexhaustible. Various parts of the globe are daily adding to the beauties of our open borders; and of late years, by the accumulation of exotics, the British parterre may be thought to rival the glowing profusion of the tropics.

The utility of an acquaintance with the riches and beauties of vegetable nature, which embellish every villa and cottage, is now universally felt; and it can scarcely be doubted, but that in

conformity with this feeling, every scholastic establishment, assuming the least pretension to respectability, will, ere long, enumerate BOTANY amongst its principal studies. Ignorance of the plants which daily meet the eye, will then subject every one to the same pity or censure as a deficiency in other attainments. Nothing, surely, more rational can be taught than a knowledge of those things which we perpetually mix with.

Independently of the extension of that knowledge which is so closely allied to our existence, in respect of our food, clothing, and habitations, the study of the vegetable creation may be encouraged for its own sake; for the sake of the delights it affords. This is feelingly referred to by the late President of the Linnean Society, who says, One idea is indeed worthy to mix in the pure contemplation of Nature, the anticipation of the pleasure we may have to bestow on kindred minds with our own, in sharing with them our discoveries and our acquisitions. This is truly an object worthy of a good man, the pleasure of communicating virtuous disinterested pleasure to those who have the same tastes with ourselves; or of guiding young ingenuous minds to worthy pursuits, and facilitating their acquisition of what we have already obtained. If honours and respectful consideration reward such motives, they flow from a pure source. The giver and the receiver are alike invulnerable, as well as inaccessible, to envy, jealousy, or rivalship, and may pardon their attacks without an effort.

With an increasing taste for rational and refined pursuits; with an increasing fund of materials to administer to its gratifications; and, we hope, with some benefits arising out of experience, there is reasonable ground for presuming that the Botanic Garden will every year add new patrons to old ones, till its flowers are known to all who can feel the pleasures of applying its precepts to practice.

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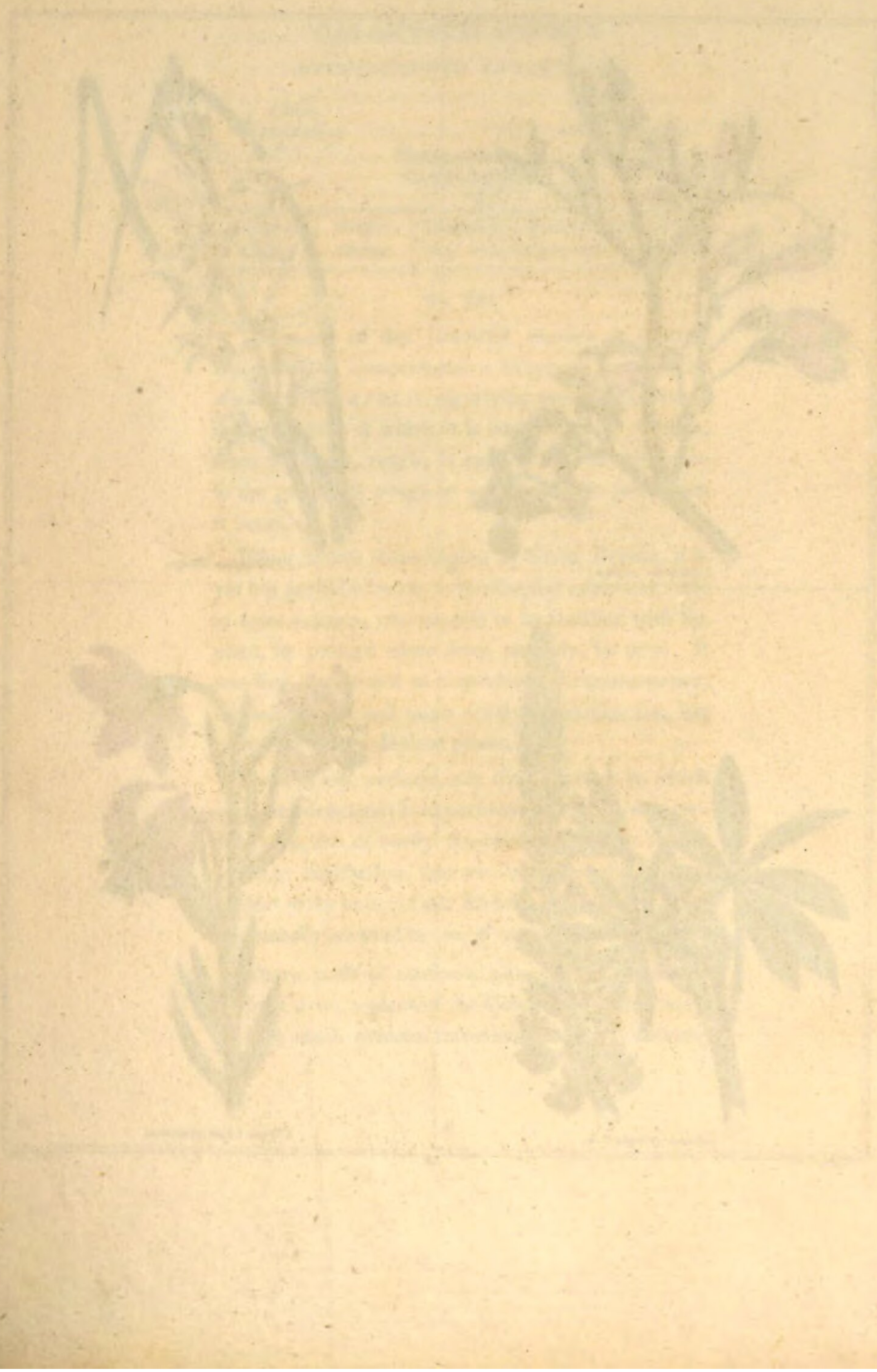

Calampelis scabra. ½

Phalangium liliago. ½

Lupinus polyphyllus. ¼

Lilium Chalcedonicum. ⅓

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CALAM'PELIS SCA'BRA.

ROUGH-PODDED CALAMPELIS.

Class.
DIDYNAMIA.

Order.
ANGIOSPERMIA.

Natural Order.
BIGNONIACEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Chile.	20 feet.	Aug. Nov.	Perennial.	in 1823.

No. 289.

The name of this beautiful climber is derived from that all comprehensive language the Greek; KALOS and AMPELIS, signifying pretty vine, being the two words of which it is compounded. Scabra, from the Latin, rough, is applied to it in reference to the peculiarly rough or wrinkled fruit-pod which it bears.

Being of late introduction to Great Britain, it is yet but partially known to the English cultivator; and to some persons, who happen to be familiar with the plant, its present name may, possibly, be new. It was first distributed as a species of Eccremocarpus, but subsequent and more accurate examination, has proved it to be a distinct genus.

There is not, perhaps, any class of plants in which so great a deficiency is experienced, in the flower garden, as in that of hardy climbers. Hence, it is with peculiar satisfaction, that we introduce the present subject to the notice of our friends; and we hope to see it generally adopted as one of our trellis ornaments.

Where walls of southern aspect are preoccupied by fruit trees, a plant of the Calampelis scabra may, without much evident intrusion, be added thereto;

and thus may the ornamental be combined with the useful. Its foliage does not possess a heaviness of character which would render it unsightly in such situation; for it would ramble freely and lightly amongst the branches of a wall fruit tree, attaching itself thereto by its wiry tendrils, and by its long racemes of orange flowers would relieve the barren effect of the bare branches, when despoiled of their more substantial recommendation.

If so trained, some advantage would probably accrue by the Calampelis being planted immediately against the main stem of the tree, to which it may be tied, till it has attained the height required for spreading, right and left, over the branches of its intended nurse. Thus the trunk would be afforded a shade, which some horticulturists have very reasonably conceived to be highly beneficial. Wall fruit trees, particularly the apricot, nectarine, and similar sorts, frequently have cracks in their bark, where the sap exudes from their trunks and large branches. This is in general prevented by a partial shade in summer, such as would be afforded by the spreading boughs, when growing as standards, in a state of nature.

This plant may be propagated from seeds, and as far as our own experience has proved, plants so raised, grow more freely than those from cuttings. The seedlings should be raised in a hotbed, and be kept in pots, with a little protection in winter, till the following spring. They may then be put into the open ground, against a wall or trellis, and trained thereto. A slight protection, in frosty weather, should be given to it; and it should be particularly observed that the roots be amply defended from its severity.

Sweet's Fl. Gard. s. 2, 30.

PHALAN'GIUM LILIA'GO.

GRASS-LEAVED PHALANGIUM.

Class.
HEXANDRIA.

Order.
MONOGYNIA.

Natural Order.
ASPHODELEÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
S. Europe.	1 foot.	May, June.	Perennial.	in 1596.

No. 290.

Phalangium from the Greek, PHALAGGION, a spider; a name adopted from Dioscorides. Linneus objected to it, as properly belonging to an insect, but the French botanists having divided his genus Anthericum, again restored it. The term, doubtless, originated in a fancied likeness between some parts of the plant and the insect; or from its supposed virtues as an antidote to the bite of venomous spiders; therefore, is equally as admissible as many other names. Liliago, signifies little lily.

In a former number we published the Anthericum liliastrum, to which the present plant bears a strong resemblance, only that it is smaller in all its parts. They were formerly considered as more closely connected, being included in one genus, the Phalangium liliago, being then the Anthericum liliago.

It is a border flower of long standing in English gardens, and though not of so gay an aspect as many others, still its slender unobtrusive foliage and delicate flowers, will not fail to recommend it to notice.

It should be planted in a dry warm situation, though, when in flower, a little shade would much prolong the show of its unassuming blossoms.

Hort. Kew. 2, v. 2, 269.

LUPI'NUS POLYPHYL'LUS.

MANY-LEAVED LUPINE.

Class.
MONADELPHIA.

Order.
DECANDRIA.

Natural Order.
LEGUMINOSÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Columbia.	3 feet.	July, Aug.	Perennial.	in 1826.

No. 291.

The name, Lupinus, is said to have been derived from Lupus, a wolf; in reference to a quality of the plant, by which it is said greatly to impoverish the soil, by devouring its fertility. Polyphyllus is deduced from POLU, many; and PHULLON, a leaf; a term which is not inaptly applied to this species, nor, indeed, would it be to most others of the same genus.

This is one of the most beautiful and desirable Lupines with which we are acquainted. Its free growth, the length and compactness of its racemes of flowers, as well as their colour, all combine to recommend it to notice. It should be observed that it is particularly advantageous to raise plants of it from seed, by which means some of the tallest and most luxuriant varieties will be produced. Within the last seven years, nearly twenty showy species of Lupines have been introduced from America, chiefly through the exertions of the Horticultural Society, to which every lover of a flower garden stands greatly indebted.

This plant may be divided, in the spring, for increase; or, it is readily raised from seeds, sown in the open ground, in April. A light loamy soil, and rather dry situation, are very suitable.

Bot. Reg. 1096.

LILIUM CHALCEDONICUM.

SCARLET MARTAGON.

Class.
HEXANDRIA.

Order.
MONOGYNIA.

Natural Order.
LILIACEÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Levant.	2½ feet.	June, July.	Perennial.	in 1596.

No. 292.

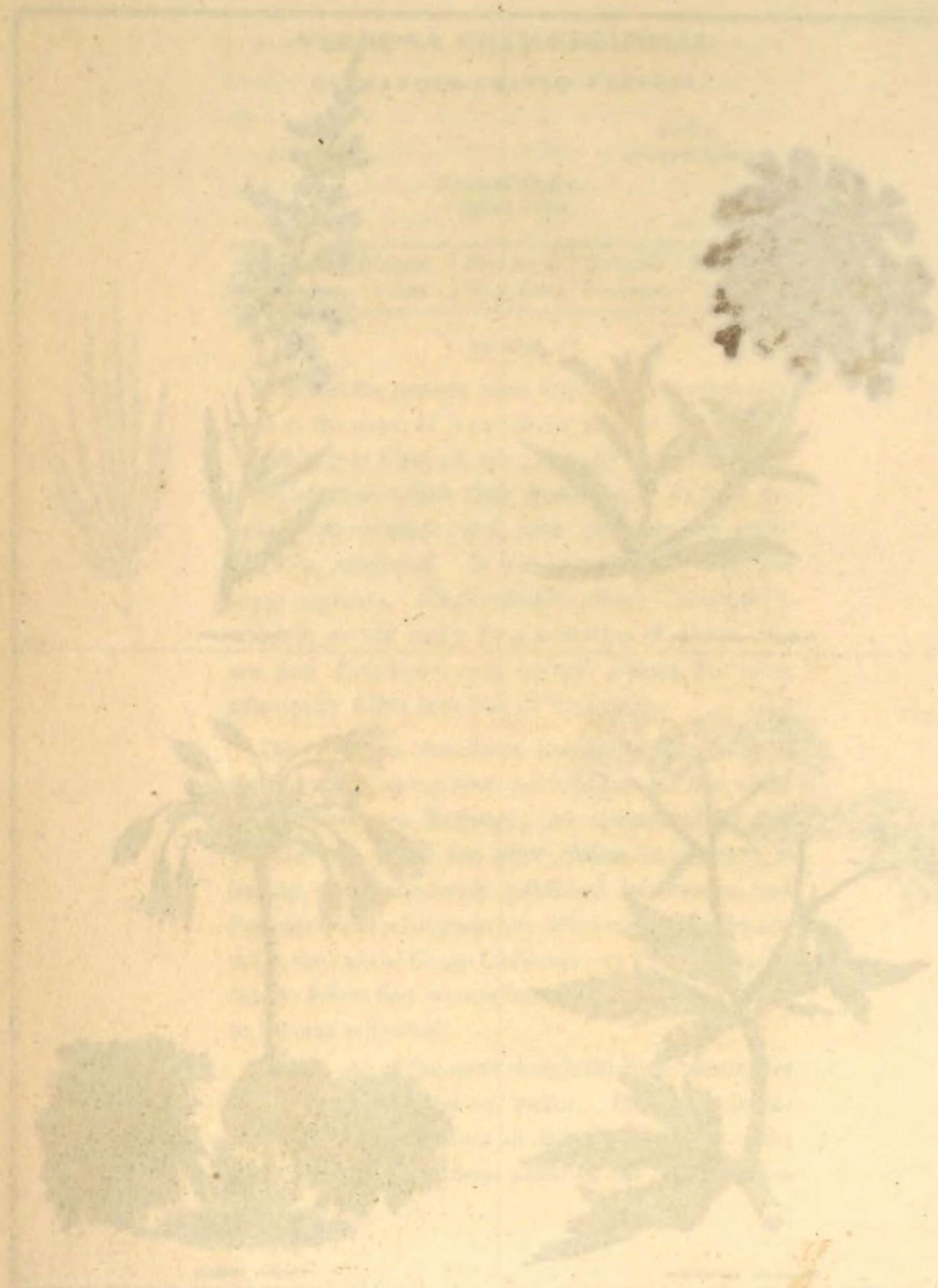
LEIOS, signifying well polished, is supposed to have been the original word on which the Greeks founded their appellation LEIRION, and hence our Lilium; a term used by us, as its original was, formerly, by the Greeks, to designate a tribe of magnificent plants; but it is probable that their name took a much wider range over the produce of the east, than, in these days of scientific acumen, is permitted to our Lilium. Chalcedonicum, from Chalcedon, an Asiatic city.

This old favourite was known in our gardens before the days of Gerard, and as he calls it the Red Lily of Constantinople, it may be presumed that it was brought thence to England. In all ages man has sought for natural objects of beauty, and it may be questioned whether, as far as circumstances would admit, equal zeal in collecting plants, did not exist three centuries ago, as at the present day.

It is certain that several beautiful varieties of Lilies were then possessed, which must have originated from attentive propagation, and which have long since been lost.

It is increased by offsets of the bulbs, which should be removed whilst vegetation is suspended.

Hort. Kew. 2, v 2. 242.



Verbena chamædrifolia. 56

Veronica pinnata. 56

Ranunculus platanifolius. 56

Cortusa Matthioli. 56

VERBE'NA CHAMÆDRIFO'LIA.

GERMANDER-LEAVED VERVAIN.

Class.
DIDYNAMIA.

Order.
ANGIOSPERMIA.

Natural Order.
VERBENACEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
BuenosAyres	1 foot.	May, Oct.	Perennial.	in 1827.

No. 293.

Whether the generic term Verbena, was originally used as the name of a particular plant is not certain. According to Pliny, it was given, by the Romans, to a tuft of grass which they made use of in their religious ceremonies; and, very probably, to other herbs so employed. It was synonymous with the name sagmina. Chamædrifolia, from Chamædrys, which is an old name for a collection of plants that are now distributed over several genera, but have principally fallen into that of Teucrium.

This plant is sometimes known as the Verbena melindres, it having been published under that name in the Botanical Register; but chamædrifolia is a specific title which has prior claims to adoption, it having been previously published by Jussieu and Sprengel, and with propriety followed by Mr. Sweet. As in the case of Geum Chiloense, we think it important to follow that nomenclature which is most likely to become universal.

This is one of the most delightful little plants that has lately come under our notice. Its intense brilliancy of colour surpasses all that we have met with; and though no glossiness exists on the flower, it has

a dazzling effect on the sight, not unlike the lustre of polished metal. The eye cannot rest upon it without evident uneasiness. If any artist or artizan, in the pride of his heart, assume to himself excess of merit for the tints he has produced, or rather, that he has discovered, let him look on the Verbena chamædrifolia, and subdue the intemperate heat of his imagination. Nothing surely can be better adapted to turn man's thoughts off his own self-sufficiency than the works of nature. Wherever he rests his attention, whether on matter organized or unorganized, there he will discover convincing evidence of his own ignorance; and at the same time, the omnipotence of a first great cause will be impressed on his mind, and influence his understanding.

The demands of this plant, under cultivation, are few and simple. In a rich light soil, and warm situation, it flourishes exceedingly. It scarcely attains a foot in height, but spreads freely on the surface of the soil; and if the branches be hooked down, or a small stone be placed on them at each joint, they strike root with great freedom, and often do so without any such attention, and thus an increase is effected with rapidity. Cuttings of the young branches, planted under bell or hand glasses, on a hotbed, make root so readily that if taken from the ends of the shoots, the buds thereon will flower with the same beauty as though it had not been removed from the parent plant. It is indeed an incessant flowerer, and, though the thermometer has been at about twenty degrees below freezing, within the last three weeks, we now have it under the mere protection of the cold frame and a mat, bearing flower buds in perfect health.

Sweet's Fl. Gard. s. 2, 9.

VERONICA PINNA'TA.

WING-LEAVED SPEEDWELL.

Class.
DIANDRIA.

Order.
MONOGYNIA.

Natural Order.
SCROPHULARINÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Siberia.	2 feet.	June, July.	Perennial.	in 1776.

No. 294.

A difference of opinion has long existed respecting the pronunciation of the word Veronica. As its derivation cannot now be determined, we think it best to comply with the most prevalent usage, which certainly gives the accent to the second, and not to the third, syllable. The name is supposed by some authors, to have been borrowed from that of a Saint of the Roman church, with whom is connected a relic, kept at St. Peter's, at Rome. This relic, called a Veronica, from VERA, ICON, a true image, is a handkerchief, bearing a likeness of the face of our Saviour; by some said to be the one that covered his face in the sepulchre; whilst others say it was used by him on his way to Mount Calvary, when it was miraculously impressed with the likeness of his face.

The Veronica pinnata is one of the prettiest of the genus. The lightness and elegance of its pinnate foliage; the neat upright growth of its stems; and the delicate tint of its flowers, all combine in its recommendation to notice.

It will grow in any common soil, and may be divided every year, at the usual seasons, if increase be as frequently required.

Hort. Kew. 2, v 1. 28.

RANUN'CULUS PLATANIFO'LIUS.

flore pleno.

PLANE-TREE-LEAVED CROWFOOT.

Class.
POLYANDRIA.

Order.
POLYGYNIA.

Natural Order.
RANUNCULACEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Germany.	2 feet.	June, July.	Perennial.	in 1769.

No. 295.

The name Ranunculus is generally allowed to have had its orgin in the Latin word rana, a frog; in consequence of some of these plants growing in moist situations, such as are inhabited by frogs. Platanifolius, from platanus, the plane-tree, and folium, a leaf. It is to be regretted that botanists ever establish names on the comparison of plants. The practice can but be considered very imperfect, inasmuch as it supposes a previous knowledge of a plant not present; and furthermore, confusion is created by the change of genera consequent on the extension of the science.

This plant is the Ranunculus aconitifolius of Curtis, and frequently known by the name of Fair Maids of France. Its delicate and neatly formed blossoms make it a great favourite with most cultivators.

It will not flourish in every soil and situation, as many have proved, who possess only a damp worn-out soil, in a smoky situation. In a rather sandy reddish loam, and a pure atmosphere, it will not fail to prosper, and to produce great plenty of its delicate flowers. It may be divided at the root, either in autumn or spring.

Hort. Kew. 2. v. 3, 354.

CORTUSA MATHIOLI.

MATHIOLUS'S BEAR'S-EAR SANICLE.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
PRIMULACEÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Austria.	6 inches.	May, June.	Perennial.	in 1596.

No. 296.

Cortusa is a name given by Mathiolus, in honour of his friend Jacob Antonio Cortusus, professor of botany at Padua; and the trivial name was subsequently added in honour of Mathiolus himself.

This plant approaches too nearly to the primula tribe to be uninteresting to any of our readers. Though it has been an inhabitant of English gardens during the last two or three centuries, still as it cannot exist under careless management and neglect, it is oftentimes lost, and as often regretted.

Its leaves are stated by Mathiolus to possess a rubefacient quality; and Curtis suggests that they should supply the place of rouge, on the pallid cheek of the fair belle, who has been unduly immured within the precincts of a crowded city. It is a simple application of the leaf to the skin awhile, which is said to produce the delicate redness; and which after some time will disappear without injury.

The Cortusa is most successfully kept in a pot of loam and peat. Shade, and a tolerably free supply of water in summer, with the cold frame protection in winter, combined with a moderate degree of attention, will preserve it in good health.

Hort. Kew. 2, v. 1, 310.

Native of Austria.	Height. 6 inches.	Flowers in May, June.	Position. Perennial.	Cultivated in 1596.

No. 996.

Dahlia superflua. ⅓

Eschscholtzia Californica. ⅓

Digitalis minor. ⅓

Linaria cymbalaria. ⅓

R.D. Smith, del.ᵗ

S. Watts. sculp.

DAHLIA SUPERFLUA.

DAHLIA.

Blood-red, short disk, Anemone-flowered variety.

Class.	*Order.*
SYNGENESIA.	POLYGAMIA SUPERFLUA.

Natural Order.
CORYMBIFERÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Mexico.	5 feet.	Aug. Oct.	Perennial.	in 1789.

No. 297.

The name of our present universally admired genus has unfortunately been subjected to change, and doubts on the propriety of using Dahlia or Georgina are continually heard. Some truly English hearts have yielded a preference to the latter, believing it to have been adopted in honour of our late revered sovereign, George III. in whose reign it was introduced; but this is not the fact; it was chosen in compliment to a Russian botanist, named Georgi. Dahl was a botanist of Sweden.

It is said that a genus has already been established under the name Dahlia, but such genus is certainly unknown to England. The character implied by the trivial name, superflua, has proved, as we formerly expected, inconstant; and another name, pinnata, which has been partially adopted, implies a character that is also variable. Specific distinction is, perhaps, unimportant, for we really believe that our gardens, at present, possess but one true species.

The Anemone, and Globe, flowered varieties possess novelty and beauty; we, therefore, give a list of them, and an estimate of their worth; soliciting indulgence for variation of quality and opinion.

ANEMONE-FLOWERED DAHLIA.

FIRST QUALITY.

		FEET.
Buff-rayed, gold disk,	HEIGHT,	4 to 5
Large rose-coloured, full flower,		4 to 5
Painted Lady, pink, striped with carmine,		3 to 4
Blood-red, short disk, very compact,		4 to 5
Light purple, mottled, compact,		4 to 5
Sweet-scabious-flowered, compact,		3 to 4

SECOND QUALITY.

Striated buff, a free flowerer,	4 to 5
Early blood-red, compact,	5 to 6
Tricuspidatum, marone, compact,	3 to 4

THIRD QUALITY.

Flamed buff, thin flower,	3 to 4
Large pink, somewhat loose, showy,	4 to 5
Spectabilis, pale red, showy,	3 to 4
Large crimson, loose, showy,	4 to 5

GLOBE-FLOWERED DAHLIA.

FIRST QUALITY.

Dark crimson, or purple,	3 to 4
Crimson bonnet, very compact, not free-flowered,	4 to 5
Dwarf blood-red, compact,	3 to 4

SECOND QUALITY.

Purpurea, compact,	3 to 4
Neat crimson, small, compact,	3 to 4
Tall blood-red,	4 to 5
Very double, iron red, small, very compact,	3 to 4
Iron red, large, compact,	3 to 4

THIRD QUALITY.

Lilac,	3 to 4
Crimson, somewhat loose,	4 to 5
Blood-red,	2 to 3
Feathered, light crimson, loose,	5 to 7

Hort. Kew. 2, v. 5, 87.

ESCHSCHOLT'ZIA CALIFOR'NICA.

CALIFORNIAN ESCHSCHOLTZIA.

Class.
POLYANDRIA.

Order.
MONOGYNIA.

Natural Order.
PAPAVERACEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
California.	1 foot.	July, Oct.	Perennial.	in 1826.

No. 298.

Eschscholtzia after Dr. Eschscholtz, the Physician of Captain Kotzebue's expedition. Californica, from California, a peninsula of the western coast of North America, where this plant was discovered by the London Horticultural Society's Botanical Collector, Mr. David Douglas.

The beautifully rich yellow colour of these flowers, which so nicely harmonizes with the delicate foliage of the plant, at once recommends it to favour. Though of perennial continuance, in the warmth of its native country, it must here, in the open garden, be cultivated as an annual.

Seed should be sown in a hotbed in March, and as these plants, like most others of the natural order to which they belong, are impatient of removal, when they are an inch high they should be carefully transplanted into small pots separately. In this state they may remain in the hotbed, a fortnight or longer, till they are well established; after which they should be turned into the borders to flower. In this last operation care should be taken that the plant, with the whole ball of earth, about its roots, be turned from the pot and deposited in the border unbroken.

Sweet's Fl. Gard. 265.

DIGITA'LIS MI'NOR.

DWARF FOX-GLOVE.

Class.
DIDYNAMIA.

Order.
ANGIOSPERMIA.

Natural Order.
SCROPHULARINÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Spain.	1 foot.	July, Aug.	Perennial.	in 1789.

No. 299.

The name of the present genus originated in the Latin word digitale, signifying the finger of a glove, the application of which is self-evident. Minor, less, in comparison with others of its genus.

This unobtrusive little plant is nicely suited for the foreground of the parterre, where its flowers will be seen to advantage, without obstruction to the view of those before which it may happen to be planted.

It may be increased slowly by division of its roots, but far more abundantly by its seeds. These should be sown in the autumn, in pots of light loam, with which a small quantity of decayed leaves has been mixed to prevent its hardening. The pots should be kept in the cold frame during winter, and the young plants which will appear in the spring, need not be removed till they are nearly an inch high. They should then be transplanted into beds of light rich loam, at the distance of about six inches from each other, in which situation they should remain till autumn, or the spring following. In the mean time it will be indispensable that they be kept perfectly free from weeds, and have occasional waterings in the summer, if the season be such as to demand it.

Hort. Kew. 2, v 4, 28.

LINA'RIA CYMBALA'RIA.

IVY-LEAVED TOAD-FLAX.

Class.
DIDYNAMIA.

Order.
ANGIOSPERMIA.

Natural Order.
SCROPHULARINÆ.

Native of	Height.	Flowers in	Duration.	Inhabits
England.	6 inches.	June, Oct.	Perennial.	Old walls.

No. 300.

Linaria, from linum, flax; from the resemblance of some of their species. Cymbalaria, from the Greek KYMBE, a boat, an old name for this plant; retained by Linneus, when he called it Antirrhinum cymbalaria. A name which has been superseded by the necessary division of the genus.

Botanists have doubted whether the Linaria cymbalaria is a native of England, or whether it was introduced from Italy. A correspondent of Mr. Loudon's, in his interesting Magazine of Natural History, says that he found it on a rock, near Barmouth, where it was not likely to have escaped from a garden. This produced some observations from another correspondent, Mr. Dovaston, who wishing that none may be misled in imagining that it is a native, says, "I here declare that several years ago, in one of my numerous tours through that and other mountainous regions, I carried a box of seeds of this beautiful, graceful, and tenacious plant, which I distributed in appropriate places on rocks, ruins, churches, castles, and bridges, where I have since beheld it thriving in tresses and festoons to my fullest satisfaction. I particularly remember sowing it on the rock he mentions."

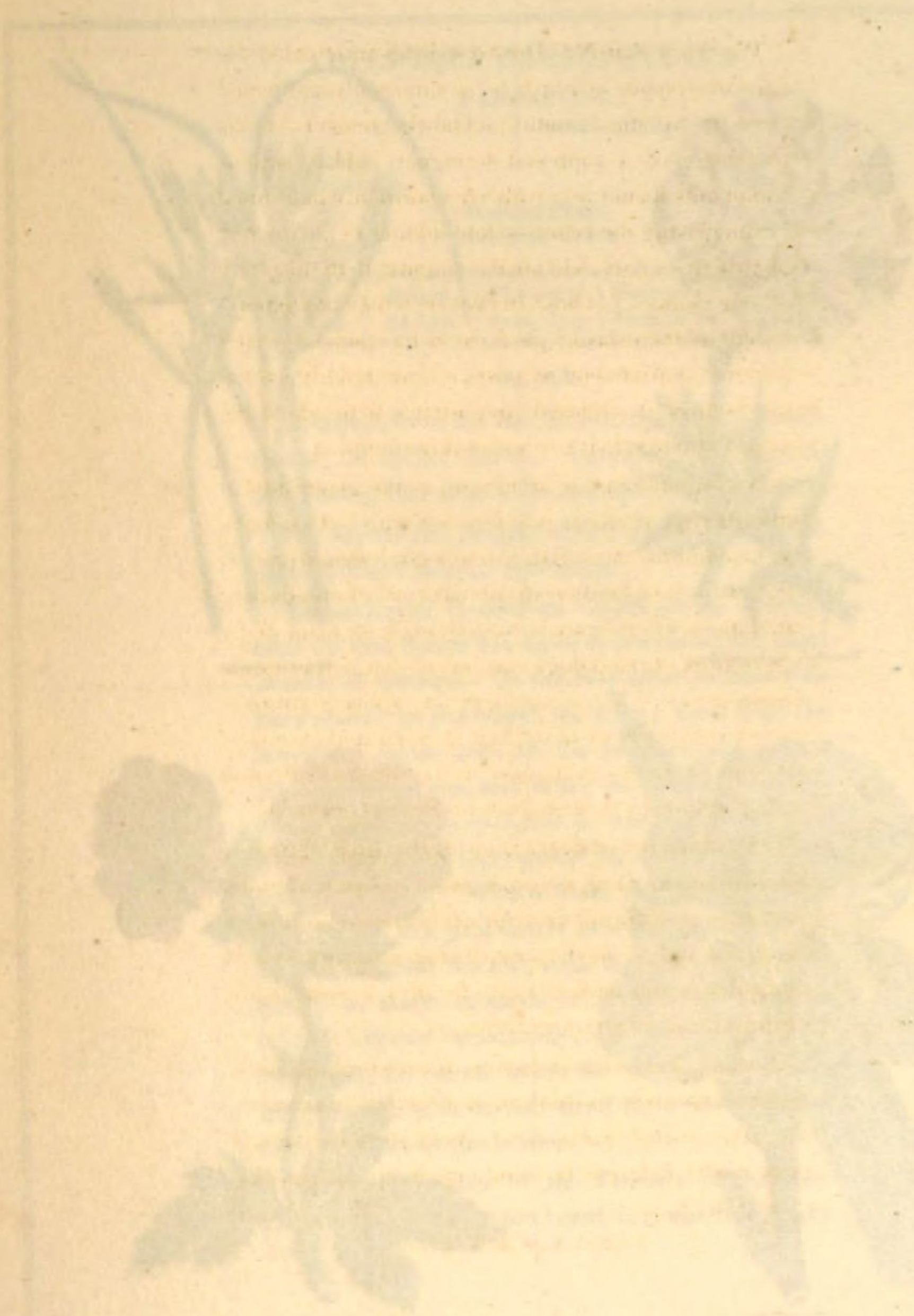
We fancy that Mr. Dovaston little anticipated the animadversions to which he so innocently subjected himself, by this candid acknowledgement of his patronage of a supposed foreigner. That serious complaints should be advanced against any individual for increasing the beauties, and adding to the interest of British scenery, will appear singular to the majority of our readers. Those, however, who have experienced an enthusiastic pleasure in the pursuit of any peculiar department of science, can readily excuse the feelings of exclusive importance with which the minds of naturalists are sometimes occupied.

No established law of nature, in the geographical distribution of plants is interfered with. Under the same latitudes of the eastern and western hemispheres, the plants are neither all similar nor all dissimilar; therefore, whether seeds be conveyed by man, or by the waters of the deluge, we see no distinction in the consequence. Who, amongst us, would venture to assert the propriety of excluding cultivated exotics—the edible from our tables, or the ornamental from our gardens; why then the flowers from our fields!

We would be content to register Britain's legitimate post-diluvian Flora as it now stands, class future discoveries as doubtful natives, or acclimated subjects, and encourage all to become disseminators of new beauties over our native land, for the benefit and gratification of future generations.

After all, the calm looker-on must smile at the effects of any recent dissemination of the Linaria cymbalaria, since Parkinson, about six generations ago, has said "It groweth naturally in divers places of our land."

Hort. Kew. 2. v. 4, 10.



Dianthus caryophyllus. ⅓

Hypoxis erecta. ⅓

Iris pallida. ½

Potentilla Russelliana. ½

E.D. Smith. del.

S. Watts sculp.

DIAN'THUS CARYOPHYL'LUS.

CARNATION.

Variety: Strong's Duke of York.

Class.
DECANDRIA.

Order.
DIGYNIA.

Natural Order.
CARYOPHYLLEÆ.

Native of	Height.	Flowers in	Duration.	Inhabits
England.	2½ feet.	June, Aug.	Perennial.	Walls.

No. 301.

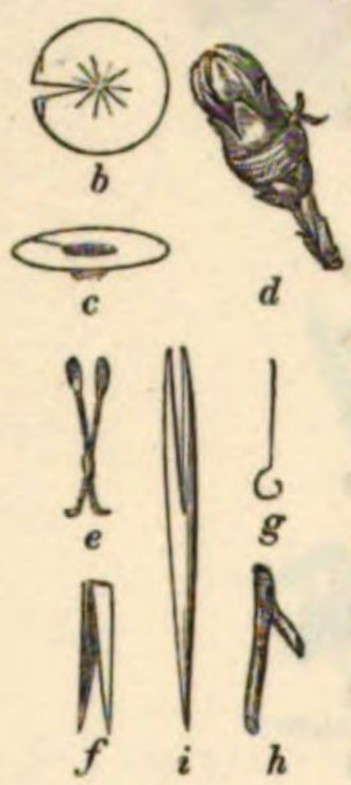
Dianthus, from the Greek DIOS, ANTHOS, Jove's flower; or divine flower. Caryophyllus; from its scent being like that of the caryophyllus, or clove.

We devote our present article to the elucidation of the florist's manual operations.

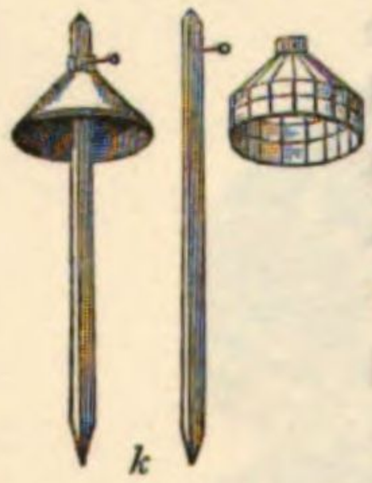
The laying of Carnations should not be deferred after the first flower has opened, and shown the plant worthy of increase. In the first place, a little rich loam should be put round the plant; then from the lowermost shoots trim off the leaves to the second joint from the top, and make an incision through that joint as shown in figure *a;* and cut off the portion of the tongue represented by dots, immediately below the joint. With a hook, placed just behind the incision, this part should now be fastened nearly an inch beneath the soil, with the end of the shoot turned as much upwards as it will bear without injury. Water occasionally, and in six weeks the layers may be cut off where the incision was made, and removed, with the soil about their newly formed roots, to a pot or the border.

We give sketches of the Florist's implements. The first of these is the petal card, *b, c,* which is usually

a



b *c* *d* *e* *g* *f* *i* *h*



k

fixed round the calyx, to support the petals. It may be made of strong paper, of the colour of the foliage. It should be round, and of the size of the expanded flower—about two inches and a half diameter. Six or eight cuts are to be made in the centre, half an inch long, and one continued to the circumference. Two small incisions are then to be made from the circumference inwards, which should end at about the eighth of an inch from the opening cut, and the same distance from the outer edge; thus, little clasps will be formed, to fasten, the one on the other, and hold the petal card together, when put on the flower. Instead of the central cuts in the petal card, some florists perforate it, by carefully forcing the dressing-stick through the centre, and thus a short tube is produced at the back, in effect the same as by the first method.

The calyx should be neatly tied round with fine thin bass, as at figure *d*, to prevent its bursting.

The dressing-stick *i*, is made of box, round, and sharp at one end; divided and flat at the other, forming pliers. These are used for taking out, or properly disposing, the petals of the flower, previously to its being exhibited. Figures *e*, *f*, metal pliers for the same purpose. The hook *h*, is intended to fasten down the layers, and may be cut out of fern, hazel, or other branches. Figure *g*, a wire bearer; which, with the assistance of an awl, may be inserted into the upright support, to form a bearer for the flower, as seen in the representation of the perfect plant.

Figure *k* is a shade, usually made of brown paper, with a wire rim, and painted; this is intended to retard the flowering; that of glass is to forward it; both afford protection from rain.

Hort. Kew. 2. v. 3, 79.

HYPOXIS ERECTA.

UPRIGHT HYPOXIS.

Class.
HEXANDRIA.

Order.
MONOGYNIA.

Natural Order.
HYPOXIDEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
N. America.	6 inches.	July, Aug.	Perennial.	in 1752.

No. 302.

The generic name, Hypoxis, is compounded from the Greek language, out of the words HUPO, signifying beneath; and OXUS, sharp, or pointed, It is intended to distinguish the form of the capsule, the lower part or base of which is tapering and pointed. Erecta, from the Latin, upright.

This flower is not one of those which obtain admirers by excess of gaiety—by a brilliancy that seems to follow the beholder as he recedes from the object of his attention. It should not, however, be forgotten, that it is with flowers as with mankind, something will be discovered in the character of almost every one which may claim our admiration; and out of which some portion of gratification may be collected to add to our general stock of happiness.

Being a native of the pastures of North America, it may reasonably enough be supposed that this plant should withstand the severity of our climate without injury. Experience, however, has shown us that the contrary is often the fact; and that it is unsafe to leave it fully exposed in very severe winters.

A light soil, composed of two parts sandy peat, and one part fresh loam, is congenial to its growth.

Hort. Kew. 2, v, 2, 254.

IRIS PALLIDA.

PALE IRIS.

Class.
TRIANDRIA.

Order.
MONOGYNIA.

Natural Order.
IRIDEÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Turkey.	3 feet.	May, June.	Perennial.	in 1596.

No. 303.

Iris, the rainbow, after which this family is named. Pallida, pale-coloured. The name Fleur-de-lis, which is sometimes applied to this plant, has been noticed under No. 274. In addition to its heraldic uses, there stated, it may be observed as the usual mark employed to distinguish the north point, both in the compass itself, and on maps and charts. The choice of this sign was not accidental; but was adopted by John de Giova, a Neapolitan, more than five hundred years ago, in honour of France and his own monarch, who was a branch of the French royal family. Though the magnet was known at a very early period, it is believed that Giova either first adopted, or greatly simplified, its use in navigation.

The Iris pallida is a tall handsome species; and its flowers possess a peculiar delicacy both of tint and texture. It will grow and increase in any soil or situation in which the Iris is usually planted, but the most luxuriant produce of flowers is yielded when it is grown in a dry sandy earth; and on a sloping surface, with a southern aspect. It may be divided in spring or autumn, but the latter season should be preferred for its removal.

Hort. Kew. 2, v. 1, 119.

POTENTIL'LA RUSSELLIA'NA.

RUSSELL'S HYBRID CINQUEFOIL.

Class.
ICOSANDRIA.

Order.
POLYGYNIA.

Natural Order.
ROSACEÆ.

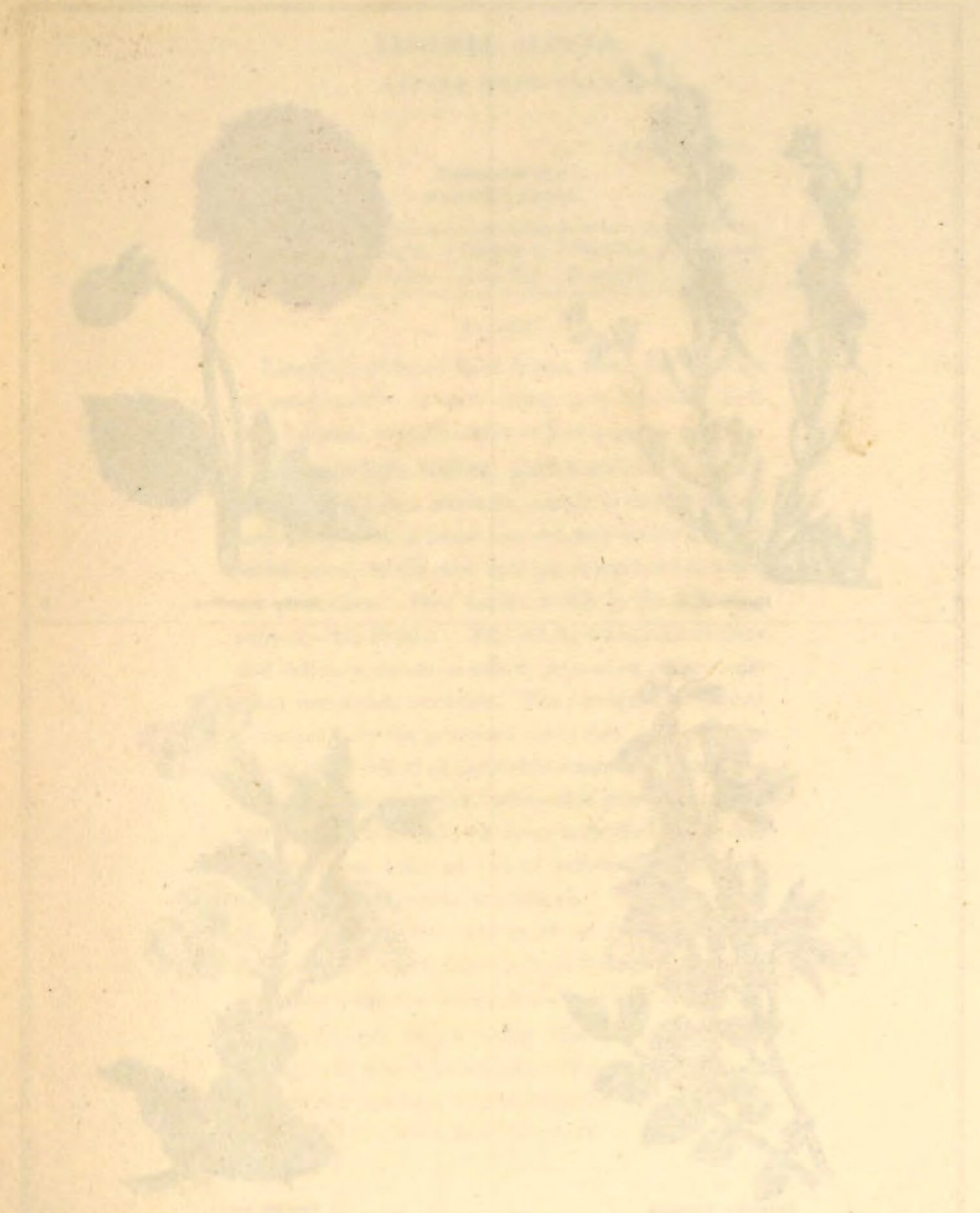
Origin.	Height.	Flowers in	Duration.	Raised
Hybrid.	2 feet.	June, Sep.	Perennial.	in 1827.

No. 304.

The name Potentilla, is deduced from the Latin word potentia, signifying power, in allusion to its medical properties. Russelliana, is given as a trivial name, on account of this being a hybrid plant, raised by Mr. William Russell, Nurseryman, of Battersea.

For the production of perfect seeds of any vegetable, it is necessary that the farina, or powder-like substance, which is found in flowers, should be applied to the stigma or summit of its style. This is generally the natural consequence of their position and contiguity, but sometimes it is effected through the instrumentality of insects, or even the atmosphere. The anthers which contain such farina may, by the curious florist, be removed, previously to its dispersion, and the farina of some other species of the same genus may be applied instead of its own, In such case, if seeds are thereby perfected, they are found to produce hybrid plants, partaking of characters intermediate between the two which have been the object of experiment. By this means has our present plant been originated, between Potentilla formosa and Potentilla atrosanguinea. It may be divided at the root for increase.

Sweet's Fl. Gard. 279.



Linaria alpina. ½

Dahlia superflua. ½

Dictamnus fraxinella. ½

Mimulus luteus. ½

E.D.Smith. del.r 77. S.Watts. sculp.

LINA'RIA ALPI'NA.

ALPINE TOAD-FLAX.

Class.	*Order.*
DIDYNAMIA.	ANGIOSPERMIA.

Natural Order.
SCROPHULARINÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Austria.	6 inches.	July, Sep.	Perennial.	in 1570.

No. 305.

Linaria is deduced from linum, flax; the herbage of some species of each being very similar. It is called alpine, being a native of European mountains.

This neat little trailing plant is suitable for rock-work, where, in a southern aspect, a dry situation, and sandy peat, it bears our severest winters, which would rarely be the case, in a low damp border, without protection. How unlike is this to the following subject—the Dahlia! The one by its humble stature and delicacy, seems to solicit protection; whilst the other commands attention. The Linaria is regarded principally by the practised cultivator. The Dahlia becomes an object of agreeable interest to every one who possesses a garden, unless that possessor be one whose mind is so chained down to mother earth, that he never can raise an eye of satisfaction upon the beauties of her vegetable children. These pourtray too much happiness—too much of the spontaneous loveliness of nature, to meet even the placid contemplation of some few—very few—morbific souls.

The Linaria alpina being raised from seeds, in spring, will flower in autumn. Young seedlings, or well-rooted cuttings, best survive the winter.

completely dwarf stature. This versatility is very encouraging to the propagator, since he may confidently rely on acquiring "something new."

The present season renders it of importance that we now notice propagation from growing plants. A strong root, when planted, will produce several shoots. If no increase be wanted, all, excepting the strongest, should be pulled up, nearly as soon as they appear. If increase be desired, let them grow till they are three or four inches high, then remove the soil a little, and carefully draw them out from the crown of the parent plant; they will sometimes be found to have thrown out a root, but whether this be, or be not the case, these shoots will require only to be planted in a rather moist situation, and shaded. In three weeks, they may be removed, with a little soil about each, to the situation in which they are to flower. If, when they are taken from the old plant, a hand-glass be placed over them, or if they be separately potted, and put into a hotbed for a fortnight, it will assist in forwarding them, and they will flower as early as the parent plant.

The single stem, remaining to each root, should be divested of the side shoots, produced at two, or sometimes more, of the lowermost joints. This is requisite to the formation of a handsome plant, in lieu of a wild bush. Cuttings may be made of these superfluous side shoots, or no buds can be formed to produce the second year's shoots. They strike root most readily. The only point of importance is that they be cut off immediately beneath a joint; and they may be treated as the suckers, but require a longer time to make root.

Hort. Kew. 2, v, 5, 87.

DICTAMNUS FRAXINELLA.

RED FRAXINELLA.

Class.
DECANDRIA.

Order.
MONOGYNIA.

Natural Order.
RUTACEÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Germany.	3 feet.	June, July.	Perennial.	in 1596.

No. 307.

The word Dictamnus was used by the Greeks, and its original import is now uncertain. It is the name of a Cretan city, and has been said to be given to a plant which was abundant there; but Linneus, when he gave it to the present plant, observed that it was deduced from the Greek TIKTEIN, to bring forth fruit. Fraxinella, is the diminutive of Fraxinus, signifying a little ash; a name used for this plant by Tournefort and others, from its pinnate leaves.

The Fraxinella is known to every one conversant with herbaceous plants; and is generally admired for the fragrance of its entire herbage, which to most persons is very agreeable. Another of the well-known qualities belonging to it is the inflammability of the exhalation from the little resinous glands with which it is covered. In very dry warm weather, this will be seen to take fire, on bringing a candle near to it; but the best method of showing this property, is to gather a portion of the plant, in dry weather, and hold it near to a small candle, in a room that is otherwise dark.

It may be divided, or raised from seeds, and requires no peculiar management.

Hort. Kew. 2, v. 3, 34.

MIMULUS LUTEUS.

Variety: rivularis.

SPOTTED YELLOW MONKEY-FLOWER.

Class.	*Order.*
DIDYNAMIA.	ANGIOSPERMIA.

Natural Order.
SCROPHULARINÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Columbia.	1 foot.	June, Aug.	Perennial.	in 1826.

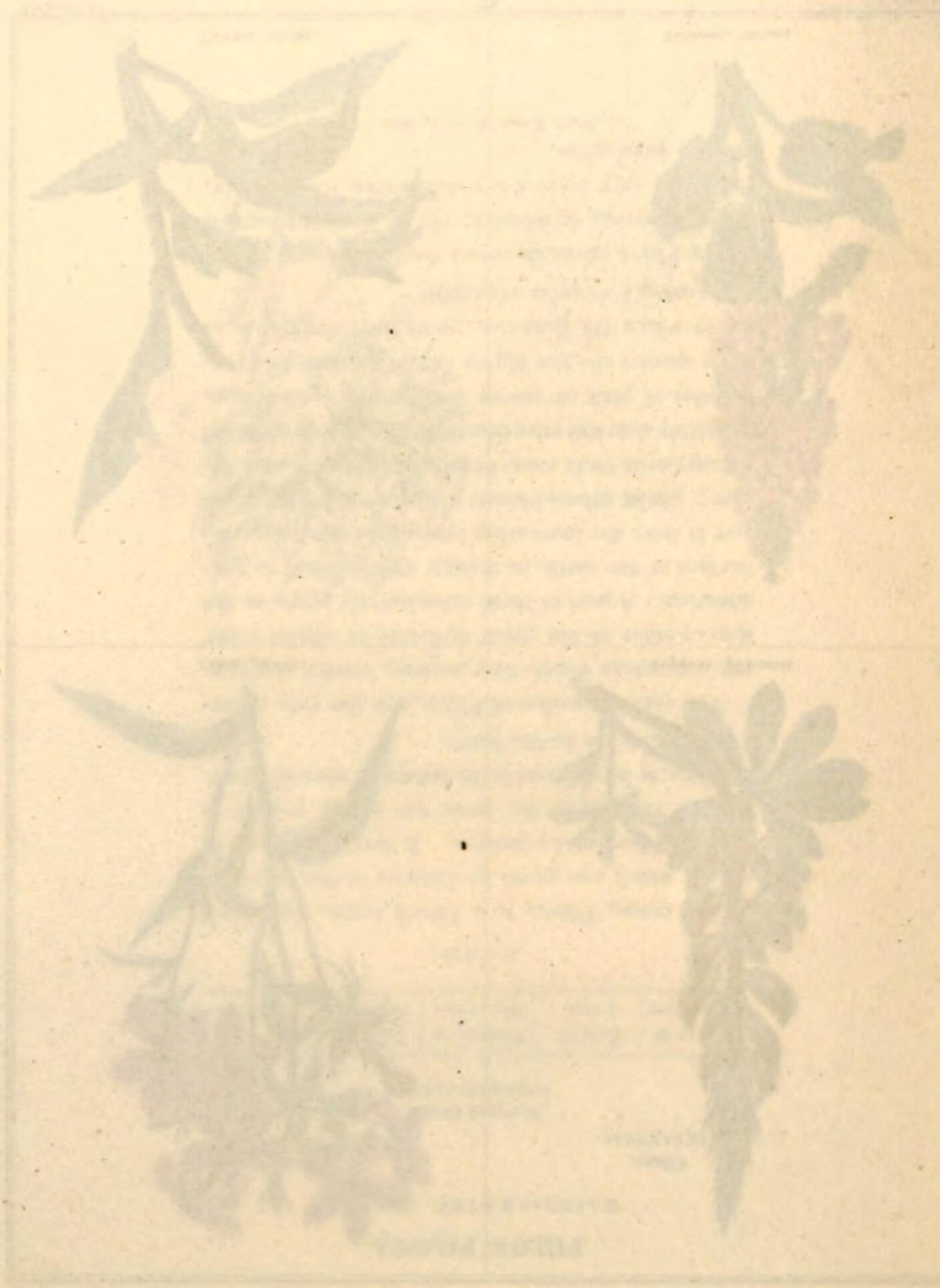
No. 308.

The word Mimulus may be fairly imagined to convey some allusion to a monkey, or mimic; and was probably suggested by the shape of the flower. This variety has been called rivularis, in consequence of its delighting in a watery situation.

Though this plant is but a variety of the one given under No. 116, still it is so distinct, and in general, so peculiarly marked, that we imagine it will prove a desirable acquisition to those who already possess the original variety. The rich brown spot, on the lip of the flower, is inconstant in seedlings; but when large, it is thereby rendered particularly handsome, and very gay.

It spreads and increases fast, by its creeping stems; particularly when kept in a moist situation. It succeeds admirably when planted by the side of a pond; or when kept in pots, standing in pans of water. Under such treatment, the stems and leaves assume a browner colour, and the character of the plant altogether, becomes more distinct from the old variety, than when growing in the borders. It seeds freely, and spring-sown plants will blossom in the latter end of summer.

Bot. Reg. 1030.



Phlox pilosa. 1/3

Lupinus perennis. 1/2

Pæonia edulis. 1/3

Betonica incana. 1/2

E.D.Smith. del.^r

78.

S.Watts. sculp.

PHLOX PILOSA.

HAIRY-LEAVED PHLOX.

Class.
PENTANDRIA.

Order.
MONOGYNIA

Natural Order.
POLEMONIACEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
N. America	1 foot.	May, June.	Perennial.	in 1759.

No. 309.

The name, Phlox, is a Greek word, signifying flame; which was given by Linneus to this family of plants in lieu of Lychnidea. It may be presumed, that he considered the latter too nearly related to Lychnis, to be retained in his reformed nomenclature. Pilosa, from the Latin, hairy.

The various species of Phlox, and the very different characters which they assume, render one portion or other of the genus desirable in almost every situation. A part of them submissively creep on the surface of the earth, as though they desired to protect it from the increasing heat of the opening summer; whilst others elevate themselves in autumnal beauty, over their more humble neighbours, and irresistibly demand attention to their self-appropriated mantles of pink or snowy flowers. Many intermediate species are also highly attractive, and progressively adorn the parterre, throughout the season of the garden's cheerful triumph.

The Phlox pilosa increases freely, and may be divided in spring or autumn; or, in May, cuttings of the stems may be made, which strike root readily, under a hand-glass.

Hort. Kew. 2, v. 1, 325.

LUPI'NUS PEREN'NIS.

PERENNIAL LUPINE.

Class.
MONADELPHIA.

Order.
DECANDRIA.

Natural Order.
LEGUMINOSÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
N. America.	2 feet.	May, June.	Perennial.	in 1658.

No. 310.

So greatly did the Lupinus of the ancients spread over and spoliate the soil of its nutritious properties, that it attained its name from lupus, a wolf. Another derivation was assigned the word, from the Greek LUPE, signifying grief; in allusion to some fancied medicinal property of the plant, by which it produced a sadness of countenance. Perennis, or perennial, was adopted in contradistinction to the several annual species, which were in cultivation more than an hundred years with the present plant, before another perennial species was known. And though the addition of perennial Lupines to our gardens has rendered the title objectionable, it was not till the boundless vegetable treasures of America were zealously explored, that this took place; whence our collection of perennial Lupines has been increased. Of these, many new species have been introduced by the London Horticultural Society, since the year 1825.

As the Lupinus perennis is sometimes, though not frequently, lost, we would recommend its occasional increase from seeds. They should be sown in the spring; and a little variation in the colour of some flowers of the seedlings will occur.

Hort. Kew. 2, v. 4, 285.

PÆO'NIA ED'ULIS. var. Whitleji.

EATABLE PÆONY.

Class.	*Order.*
POLYANDRIA.	DIGYNIA.

Natural Order.
RANUNCULACEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Siberia.	2 feet.	May, June.	Perennial.	in 1784.

No. 311.

Pæonia is deduced from Pæon, the name of a fabulous physician of the ancients. Edulis, from the Latin, eatable.

The old English botanists held the Pæony in considerable estimation; though, from their works, it may be inferred that two species were all which they could boast of possessing. One of these was the Pæonia officinalis, which now is the most common in our cottage gardens. But with this they were not idle cultivators, for by raising seedlings they obtained varieties which, it is probable, were fully equal to any of the present day. The rich deep colour of the full double flower of the common Pæony, is really but little esteemed, yet it is difficult to estimate with what degree of pleasure we should receive such a plant from abroad, were none of the genus previously known to this country. Many amongst us would, indeed, be lost in admiration of its boldness. According to Camerarius, plants were sold, at Antwerp, in the sixteenth century, at twelve crowns each, an important sum at that day.

Formerly, the herbaceous species only of the Pæony, were known in English gardens; the Moutan,

or Chinese tree Pæony, being a subject of far later introduction. It was obtained by Sir Joseph Banks, from China, only about forty years ago. The wonder-exciting tales of the magnificence, the costliness, and the beauty, of this plant had long been known to Europeans; though the plant itself had never been procured. The Chinese, themselves, were said to have sold plants of some of the choice varieties, at an hundred ounces of gold each; and in France, on the first introduction of the Moutan, it sold at nearly an hundred pounds sterling.

We now arrive at the introduction of another portion of this genus, the Pæonia edulis; or, as it is sometimes called, Pæonia albiflora, of which our figure represents one of the varieties. This, also, was introduced from China, but at a still later date, and like the old sorts, is herbaceous. The species includes varieties with both double and single flowers, and these also varying from almost white to a deep rose colour; hence the name albiflora, or white-flowered, becomes objectionable. The term edulis, or eatable, is certainly preferable, having been adopted on account of the uses made of the root and seeds, where some of the varieties are indigenous.

Where ornamental gardens are tolerably extensive, or lawns are varied by mounts and shrubs, the Pæony yields a boldness of character which is peculiarly suited to their decoration. It flourishes in exposed or shady situations, and may be increased by division of the roots. Many varieties produce seed; and this should be sown in autumn, where the young plants may remain undisturbed, at least two or three years, as they slowly grow to maturity.

Hort. Kew. 2, v. 3, 316.

BETONICA INCANA.

HOARY BETONY.

Class.
DIDYNAMIA.

Order.
GYMNOSPERMIA.

Natural Order.
LABIATÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Italy.	9 inches.	June, July.	Perennial.	in 1759.

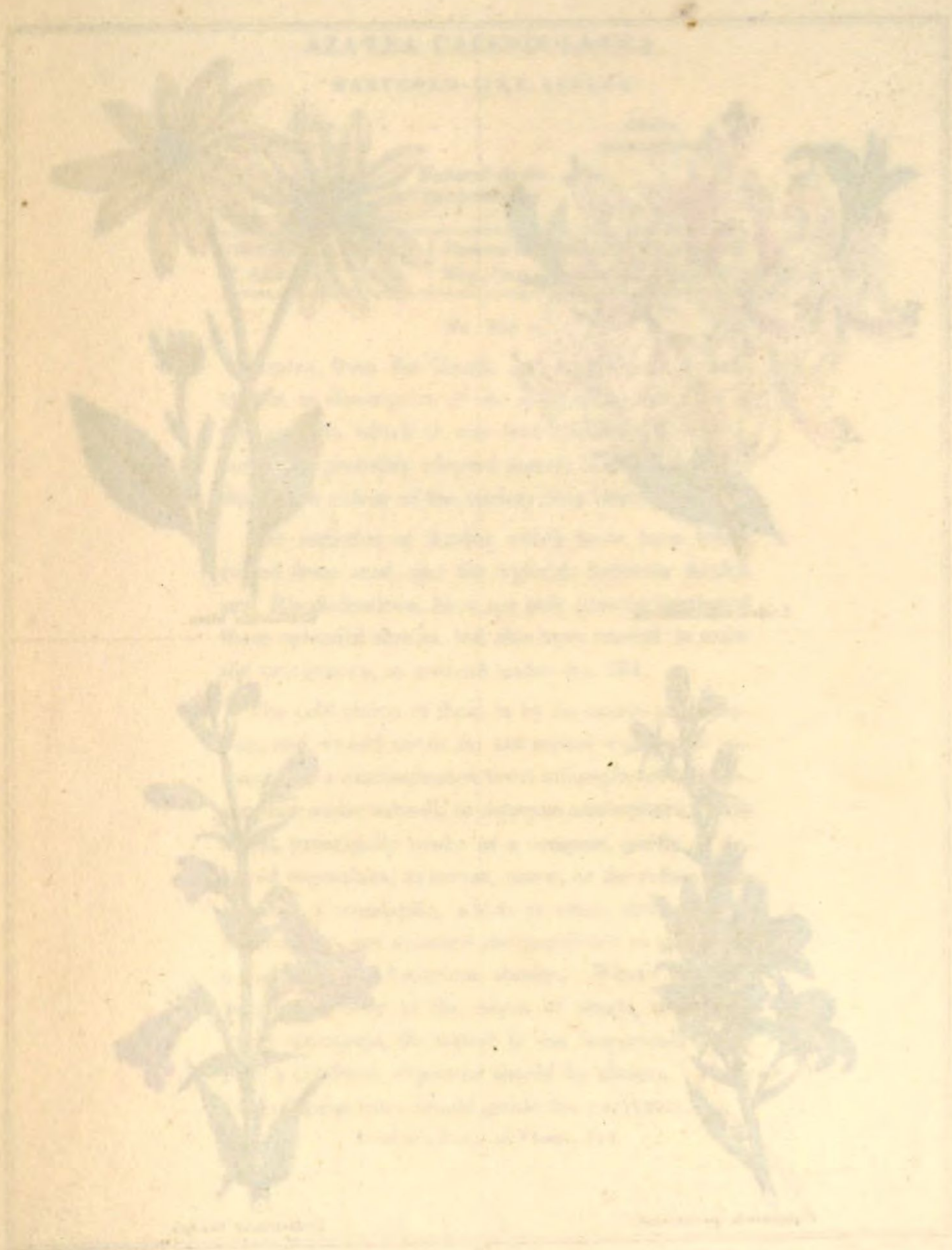
No. 312.

The word Betonica is a corruption of vettonica, which originated in Vettones, the name of an ancient people of Spain; who, according to Pliny, first noticed its virtues. Incana, from the Latin, hoary.

It is supposed that the vettonica of the heathen Europeans was a species of our serratula, to which superstition attributed the most unaccountable properties. An ancient writer described it as of so glorious a quality, that whatever house it were planted round, would thereby be put under the protection of their gods. That the commission of crimes in such domicile would not incur their vengeance, nor require a propitiatory sacrifice. Thus the Betonica may serve to remind us of the superstition which existed at the period of the christian era; and of the blessings which christianity diffused by the annihilation of such infatuated doctrines.

The Betonica incana forms a desirable variety amongst herbaceous plants; and it would secure much more of the admiration of the superficial observer, did it not, rather intimately, resemble some of our generally known indigenous plants. It requires no peculiarity of management.

Hort. Kew. 2, v. 3, 396.



Azalea calendulacea. 1/3.

Rudbeckia hirta. 1/4

Campanula pyramidalis. 1/3

Pentstemon roseus. 1/3

AZA'LEA CALENDULA'CEA.

MARYGOLD-LIKE AZALEA.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
RHODORACEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
N. America.	4 feet.	May, June.	Perennial.	in 1806.

No. 313.

Azalea, from the Greek AZALEOS, dry, a term chosen as descriptive of the indigenous situation of the plant to which it was first applied. Calendulacea was probably adopted merely in allusion to the the yellow colour of the variety first introduced.

The varieties of Azalea which have been lately raised from seed, and the hybrids between Azalea and Rhododendron, have not only greatly increased these splendid shrubs, but also have tended to unite the two genera, as noticed under No. 261.

The cultivation of them is by no means unimportant, and should never be attempted within the influence of a contaminated town atmosphere. Shade, a rather moist subsoil, or aqueous atmosphere; with a soil, principally peat; or a compost, partly of decayed vegetables, as leaves, straw, or the refuse from beneath a wood-pile, which is often attainable in the country, are amongst the requisites to constitute a good bed for American shrubs. Where they can be planted near to the edges of ponds, or in low moist situations, the aspect is less important, otherwise a northern exposure should be chosen. These general principles should guide the cultivator.

RUDBECKIA HIRTA.

HAIRY RUDBECKIA.

Class.
SYNGENESIA.

Order.
FRUSTRANEA.

Natural Order.
COMPOSITÆ.

Native of	Height.	Flowers in	Duration.	Introduced
N. America.	18 inches.	June, Sep.	Perennial.	in 1714.

No. 314.

This genus was named by Linneus, in honour of his predecessors, the celebrated professors of botany at Upsal, named Rudbeck. It would be difficult now to determine, whether the father or son of this name was most eminent as a man of science. The elder Rudbeck appears to have possessed talents the most versatile, with the greatest conceptions; whilst his son, whose pursuits were more immediately directed to the study of the vegetable world, may be acknowledged the more profound botanist.

To the memory of the elder Rudbeck a greater debt of gratitude is owing, by every lover of natural history, than at first may appear. It was he that first established a botanical garden at Upsal, in Sweden, which he gave to its university, and died in 1702. His son succeeded him, as professor, and became the friend and patron of Linneus; and on Linneus, also, in his turn, was the honour of the professorship at Upsal bestowed. Hence Olaf Rudbeck's garden, may be referred to as the nursery, not only of plants, but of botanical science, of the author of that science, and the source whence has sprung many of our purest pleasures.

Linneus may be looked back upon, by the naturalist, as the chief promoter of his gratifications; as another Adam, to whom was brought every living creature 'To see what he would call them.'

The advocates of every system, whether opposed to that of Linneus, or otherwise, duly estimate his labours, and are loud in his praise. As observed by Sprengel, he gave their new form to all the parts of natural history; but he deserves to be in a peculiar sense, called the founder of the historical part; for he first regulated the historical language, fixed the laws of classification, unfolded the generic characters, was the first to settle the idea of species, invented trivial names and specific characters. He enriched the science of plants by a more exact investigation of exotic Floras, and by a more sure determination of some thousand new species discovered by others.

The genus, Rudbeckia, as instituted by Linneus, has lately been divided by Mr. David Donn, and our present subject is his Centrocarpha hirta. The principal distinction between Rudbeckia and Centrocarpha, according to his division, consists in such of the species only being retained in Rudbeckia as have divided leaves, and cylindrical crowns.

The boldness of character generally possessed by the common species of Rudbeckia, better fits them for the shrubbery than the herbaceous compartment; the present, however, is of less robust character, and may advantageously occupy a place in the parterre.

In wet situations it will sometimes be destroyed, therefore a dry southern aspect, and light soil, should be chosen. May be divided, or increased by cuttings.

Hort. Kew. 2, v. 5, 131.

CAMPANULA PYRAMIDALIS.

PYRAMIDAL BELL-FLOWER.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
CAMPANULACEÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Carniola.	4 feet.	July, Sept.	Perennial.	in 1596.

No. 315.

The Latin campana, a bell, is appropriately used to form a name for this extensive genus; and pyramidalis, or pyramidal, is certainly expressive of a prominent habit of the present species.

This plant has a beautiful tall upright spike or pyramid of flowers, with straight side shoots, spreading but little, unless they be trained to a frame, when they may be extended, fan-like, to a considerable width.

In a light soil, and dry warm situation, it will succeed in the open ground; but to procure it in great perfection it must be grown in pots, with winter protection. The suckers should be taken off early in September, and planted separately in small deep pots. During winter, keep them in the window of a sitting room; but in all mild weather give them full exposure, particularly to warm showers. To save trouble, during the next summer, the pots may be sunk to the rim, in the open garden; and in winter, again taken into the house. In the following summer they will flower strong and freely. Repot the plants as often as the roots become a little matted against its inner surface, observing that each succeeding pot be increased in size about two inches diameter.

Hort. Kew. 2, v. 1, 346.

PENTSTE'MON RO'SEUS.

ROSE-COLOURED PENTSTEMON.

Class.
DIDYNAMIA.

Order.
ANGIOSPERMIA.

Natural Order.
SCROPHULARINÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Mexico.	2 feet.	June, Aug.	Perennial.	in 1825.

No. 316.

Pentstemon, from the Greek PENTE, STEMON, five stamens. The class, didynamia, comprises plants whose flowers have two long and two short stamens; therefore the fifth stamen, or more properly, the rudiment of one, found in this genus, is somewhat anomalous. The same circumstance occurs in a few other species of this class, which occasions their approach to the class pentandria. The trivial name, roseus, arose from the colour of the flower.

This, and several other species of Pentstemon, require a little protection against the changes of our variable winters. It will often be seen that a long and severe frost has not injured such plants as are somewhat tender, but that it is the alternation of cold and warm, of frost and sunshine, and we may add, drying winds in spring, which spread destruction in the flower garden, and which should be particularly guarded against, in February and March, when many exotics begin to vegetate, and are more than usually susceptible of such inconstancy of climate.

Cuttings, taken in May, strike root readily under a hand-glass, either with or without artificial heat. Or it may be raised from seeds.

Sweet's Fl, Gar. 230.

PENSTEMON ROSEUS.

ROSE-COLOURED PENTSTEMON.

Class.	Order.
DIDYNAMIA.	ANGIOSPERMIA.

Natural Order
SCROPHULARIÆ.

Native of Mexico.	Height. 2 feet.	Flowers in June, Aug.	Duration. Perennial.	Introduced in 1829.

No. 316.

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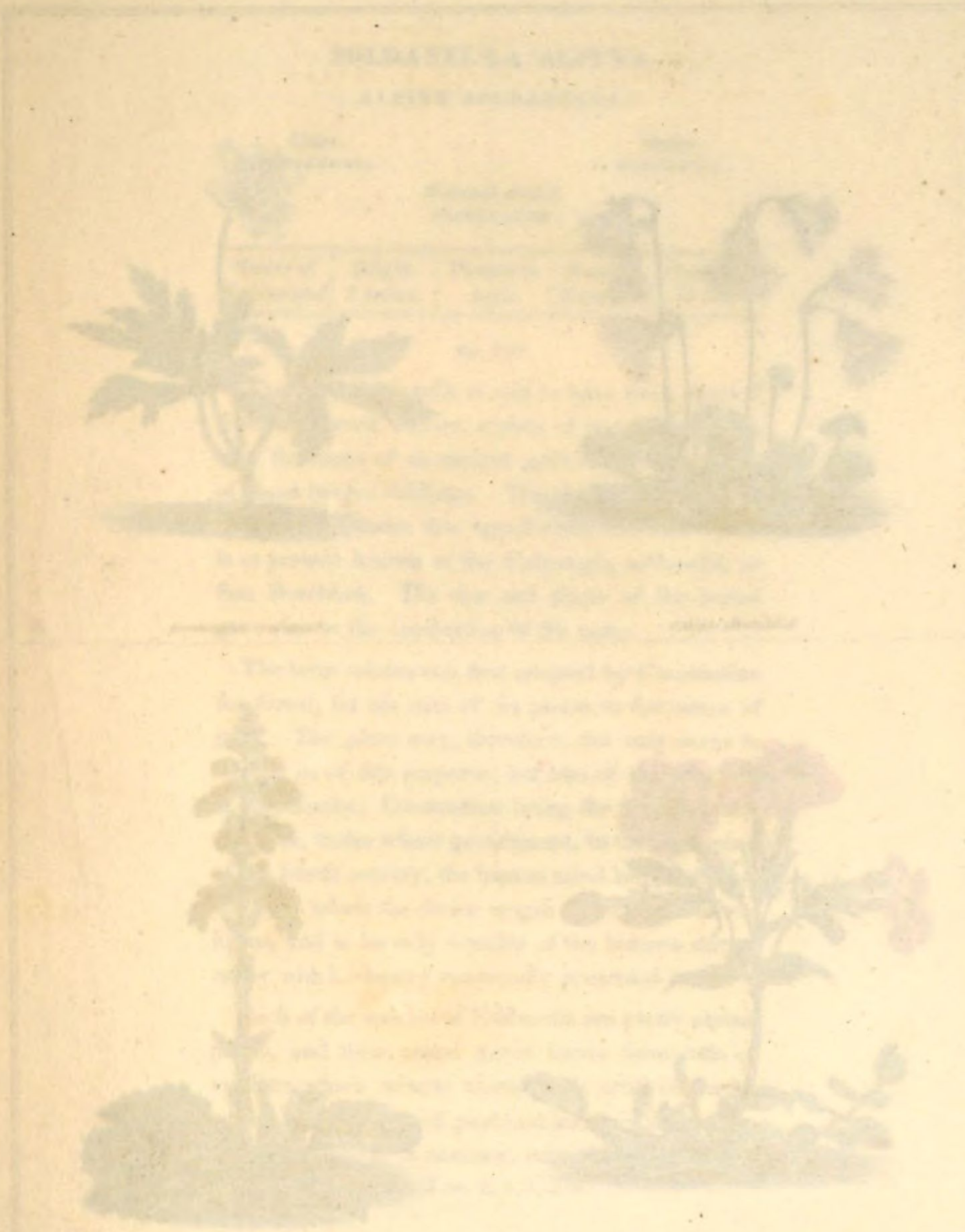
Swet's B. Gar. 230.



Soldanella alpina. 1/6

Anemone nemorosa. 1/2

Phlox crassifolia. 1/6

Horminum pyrenaicum. 1/2

SOLDANEL'LA ALPI'NA.

ALPINE SOLDANELLA.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
PRIMULACEÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Switzerland	3 inches.	April.	Perennial.	in 1656.

No. 317.

The word Soldanella is said to have been derived from the Greek SOLOS, a plate of metal; or SOLIDUS the name of an ancient gold coin, of the value of about twelve shillings. The plant referred to by the ancients, under this appellation, was that which is at present known as the Calystegia soldanella, or Sea Bearbind. The size and shape of the leaves gave rise to the application of the name.

The term solidus was first adopted by Constantine the Great, for his coin of six pieces to the ounce of gold. The plant may, therefore, not only serve to remind us of this emperor, but also of the progress of christianity; Constantine being the first christian monarch, under whose government, in the beginning of the fourth century, the human mind began, extensively, to admit the divine origin of the christian religion, and to be duly sensible of the hideous shapes under which idolatry continually presented itself.

Each of the species of Soldanella are pretty alpine plants, and their round green leaves form tufts of verdure which mingle nicely with artificial rock-work. Equal parts of peat and loam, in a situation somewhat shaded in summer, suits either species.

Hort. Kew. 2, v. 1, 310.

ANEMO'NE NEMORO'SA. flore pleno.

DOUBLE WOOD ANEMONE.

Class.
POLYANDRIA.

Order.
POLYGYNIA.

Natural Order.
RANUNCULACEÆ.

Native of	Height.	Flowers in	Duration.	Inhabits
Britain.	4 inches.	April.	Perennial.	Woods.

No. 318.

The Greek ANEMOS, signifying wind, is the origin of the present generic name. Nemorosa, from the Latin, belonging to a wood; which term was adopted as expressive of the native situation in which it is usually found.

The single wood Anemone is indigenous to most parts of Europe; but the double variety is the nursling of the florist. In almost every shrubbery, and in many gardens, this plant is particularly desirable. Under trees and shrubs, in shady corners, where but few plants will grow, this attains its greatest luxuriance. Spread over a wide space, and well established, its foliage, in spring, forms an even carpet of verdure for the earth, which is seen spotted with its delicate flowers, as the blue firmament is studded with shining stars.

The wood Anemone is occasionally found with numerous small spots on the under surface of its leaves, and sometimes, though less frequently, on its petals also. Erroneous conclusions were formerly drawn from these marks. It was believed that they were the sori, or parts of fructification, of a fern; and the plant was classed accordingly. But, such has been

the thirst for knowledge, and the zeal of modern naturalists, that errors, not more intricate than this, are sure of being detected.

The spots to which we have alluded, are now known to be a species of fungus; one amongst the thousands of epiphyllous fungi, or parasitic vegetables, which are produced on the surface of leaves; and which have opened a new field of enquiry to the botanist, as inexhaustible as it is wonderful.

A somewhat similar fungus grows on the leaves of the English Berberry, and there is great probability, that it is the scattering and propagation of this fungus upon wheat, which occasions its sterility when grown near that shrub.

Some species of fungi are common to various plants, yet every plant may, possibly, have its peculiar parasitic species—an enemy to its vitality, but an individual, in the great scheme of creation, as distinct as the superior vegetable on which it exists. The principal difference between the two must be imputed, in part, to the imperfection of our perceptions, and not wholly to the different scale of existence in which they apparently occur.

The same economy of nature is seen to prevail in a superior order of beings. As vegetables are subject to the attack of parasitic vegetables, so, also, are animals made the support of parasitic animals, and this to a degree in which our visionary organs are incapable of being our assistants. We are here on a circumscribed speck of the universe, incapable of comprehending the immensity of the worlds which surround us; or, the minuteness of animal and vegetable life which inhabits our own.

Hort. Kew. 2, v. 3, 340.

PHLOX CRASSIFOLIA.

THICK-LEAVED PHLOX.

Class.
PENTANDRIA

Order.
MONOGYNIA.

Natural Order.
POLYMONIACEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
N. America	4 inches.	April.	Perennial.	in 1827.

No. 319.

As the word flaming is sometimes used to signify fine, so the Greek word, PHLOX, which is synonymous with flame, was probably intended to mark the fine or gay character of the plant which it distinguished. Crassifolia, from the Latin crassus, thick; and folium, a leaf; a character by which this species is peculiarly distinguished.

This plant was first, we believe, received into the garden of the Right Hon. the Earl of Shrewsbury, at Alton Towers, from Philadelphia; together with another, called longiflora, a late flowering species, somewhat resembling suaveolens.

It is a most desirable addition to the many species of Phlox already introduced; its flowers equal, or perhaps surpass, any one of them in beauty; it is completely hardy, and increases most rapidly. Its shoots, which are young and small, when the flowers appear, shortly afterwards spread luxuriantly on the surface of the ground, increase in the size of their foliage, and only require confinement to the soil, to induce their striking root immediately; after which, they may be separated from the parent plant. As cuttings, also, they strike root very quickly.

HORMI'NUM PYRENA'ICUM.

PYRENEAN HORMINUM.

Class.
DIDYNAMIA.

Order.
GYMNOSPERMIA.

Natural Order.
LABIATÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Pyrenees.	1 foot.	May, June.	Perennial.	in 1820.

No. 320.

The word Horminum, from the Greek HORMIA, to excite, was adopted in allusion to the medical qualities of the plant to which it was originally given. Pyrenaicum, from its native situation.

The Horminum pyrenaicum is of compact growth, never becoming intrusive, nor requiring much attention. In a northern shady situation, we have observed that the plant will live, but it will either not flower at all, or it will do so very imperfectly. It delights in a rather strong, fresh, loamy soil, that is fully exposed to the east and south, and not very dry. It is said to perfect its seeds, and that if these be sown as soon as ripe, they will produce plants which will flower in the following summer. We have never observed that it has produced seeds with us, but this is less important, inasmuch as a division of its offsets will generally yield sufficient increase. As it is a plant which flowers early in the summer, it may be most advantageously divided in the autumn. It will bear separation at almost any time of the year; but if divided in the autumn, it will become established by the spring, and finer flowers will be the result.

Sweet's Fl. Gard. 252.

Ranunculus amplexicaulis. ⅔

Aquilegia Canadensis. ½

Hepatica triloba. ⅔

Silene maritima. ⅔

RANUN'CULUS AMPLEXICAU'LIS.

STEM-CLASPING RANUNCULUS.

Class.
POLYANDRIA.

Order.
POLYGYNIA.

Natural Order.
RANUNCULACEÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Pyrenees.	1 foot.	Apr. May.	Perennial.	in 1633.

No. 321.

The name, Ranunculus, is deduced from the Latin rana, a frog; and the term is supposed to have been used to distinguish a plant indigenous to moist places, frequented by frogs. Amplexicaulis is derived from the same language; amplexus, embracing; and caulis, a stalk. The leaf embraces the stalk; which is more clearly elucidated by the annexed engraved figure, than is possible by the use of words,

The Ranunculus amplexicaulis, with its white corolla, and yellow anthers, forms a pretty spring ornament in the borders; and its unobtrusive habit adds to its recommendation.

Though it has never failed to blossom in various situations in which we have observed it planted; such as in both town and country gardens; in moist and dry soil; in peaty soil, and in clay and loam, yet we have observed it vary exceedingly in luxuriance. In the worn-out soil of a town garden, its flowers will sometimes scarcely arrive to the height of five inches; whilst in pure air, and a fresh rich loam, it has grown nearly to the height of eighteen inches. It may be divided, for increase, either in the summer or spring.

Hort. Kew. 2, v. 3, 352.

AQUILE'GIA CANADEN'SIS.

CANADIAN COLUMBINE.

Class.
POLYANDRIA.

Order.
PENTAGYNIA.

Natural Order.
RANUNCULACEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
N. America.	18 inches.	Apr. May.	Perennial.	in 1640.

No. 322.

The term, Aquilegia, is compounded from the Latin aquila, an eagle; and lego, to gather; in allusion to the nectaries, which are, in most species, peculiarly recurved, and bear a fancied resemblance to the closing claws of an eagle. The more familiar name, Columbine, is founded on the word columba, a pigeon; a representation of the neck and head of which bird, the fertile imaginations of former botanists have discovered in the shape and colour of a part of the wild flower. Some, too, have fancied that a bird, in flight, is represented by part of this curious blossom. Indeed, almost every child has some knowledge of the peculiarity of its formation.

The dissection and examination of a singularly compounded flower, like the common Columbine, may, at least, be regarded as an innocent recreation for our young friends. Their ideas and ingenuity will thus be exerted on a part of creation which none dare to pronounce unworthy of the attention of the wisest. For, independent of the positively virtuous sentiments which such pursuits originate, the mind must thereby become less and less the willing receptacle of meaner subjects.

Dr. Withering, in noticing our native Columbine, in his Arrangement of British Plants, observes, 'The elongated and incurved nectary of this flower seems to bid defiance to the entrance of the bee, in search of the hidden treasure; but the admirable ingenuity of the sagacious insect is not to be thus defeated, for on ascertaining the impracticability of effecting his usual admission, with his proboscis, he actually penetrates both calyx and blossom near the depôt of honey, and thus extracts the latent sweets without further difficulty.' He also quotes Phillips's notice of 'the singular circumstance, that it has three distinct modes of doubling its flowers; viz. by the multiplication of the petals, to the exclusion of the nectaries; by the increase of the nectaries, to the exclusion of the petals; and frequently by the multiplication of the nectaries while the proper petals remain.'

The medicinal properties of the common Columbine, were formerly held in high estimation, but they should be regarded as dangerous; for Linneus states that children have lost their lives from improper doses. According to the old Pharmacopæias, it was chiefly used in detersive gargles.

The mode of treatment required by this beautiful species of Columbine, is not such as will be likely to preclude any one from adding it to his collection. Its increase at the root is not so great as that of many other plants, but it ripens seeds, from which an abundant produce may be obtained. These should be sown as soon as they are ripe, in an open, but warm, border, which should be kept perfectly free from weeds; and in the following summer, the young plants may be removed into their final situations.

Hort. Kew. 2, v 3, 326.

HEPATICA TRILOBA.

THREE-LOBED HEPATICA.

Class.
POLYANDRIA.

Order.
POLYGYNIA.

Natural Order.
RANUNCULACEÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Europe.	4 inches.	Feb. Apr.	Perennial.	in 1573.

No. 323.

The present generic name, Hepatica, is from the Greek HEPAR, the liver; whence comes HEPATIKOS, of a liver. The lobed shape of the leaf of this plant was supposed to resemble the liver, which gave rise to the application of the name.

Linneus regarded the calyx of the Hepatica, on account of its distance from the flower, as synonymous with the involucrum of the anemone, and consequently united these genera; but it has lately been regarded as a distinct genus, as was the case before the days of that great naturalist.

To write in commendation of the Hepatica would be superfluous, but to point out a mode of propagation which may still improve our present varieties, must be acceptable. It is not our own experience; but so strongly did Doctor Hill, in his folio work on gardening, insist on the advantages of raising the Hepatica from seed, that we hope those who have opportunity, will not fail to put it to the test.

It is known to every one, that removing the Hepatica is often its destruction; particularly if done at an improper season. The most congenial time for that purpose, we have observed to be whilst it is in

flower. Dr. Hill considered the disadvantage of transplanting it, and says, that 'Where the seed makes its first shoot the plant should remain, for experience shows this only can give it the due strength.'

In the beginning of August, dig up a border in a part of the garden, open to the morning sun, but sheltered from the full blaze of noon. Add a good portion of fresh earth from under the turf of a rich pasture. Break this very well together, rake the surface level, and scatter on the seeds. Sift over them a quarter of an inch of the same mould; and in spring, the young plants will appear. Weed and water them as occasion may require.

In the beginning of August, take out the weakest plants, so as to leave those in the bed about eight inches apart.

In the next spring some of them will flower, and in the next season, all the remainder. In the first bloom will be seen much beauty, but it will be two years more before they arrive at perfection. Among them will be found many more varieties than have been described. There will be large single flowers, valuable for their colour and expansion, semidouble for seed; and the most perfect double ones: and these in all the kinds of colour, from white through all the shades of blue; from pearl colour to the deep azure of a summer sky; and from the same white, through all the degrees of red; from the peach bloom to crimson, and to purple. The red and blue will be mixed in some, and in these he will trace the purple from that of the violet to the palest hesperis.

White will be the least common colour, and indeed a perfect white, untinctured, will be rare.

Hort. Kew. 2, v. 3, 336.

SILE'NE MARIT'IMA.

SEA CATCHFLY.

Class.
DECANDRIA.

Order.
TRIGYNIA.

Natural Order.
CARYOPHYLLEÆ.

Native of Britain.	Height. 8 inches.	Flowers in July, Sep.	Duration. Perennial.	Inhabits Sea Shores.

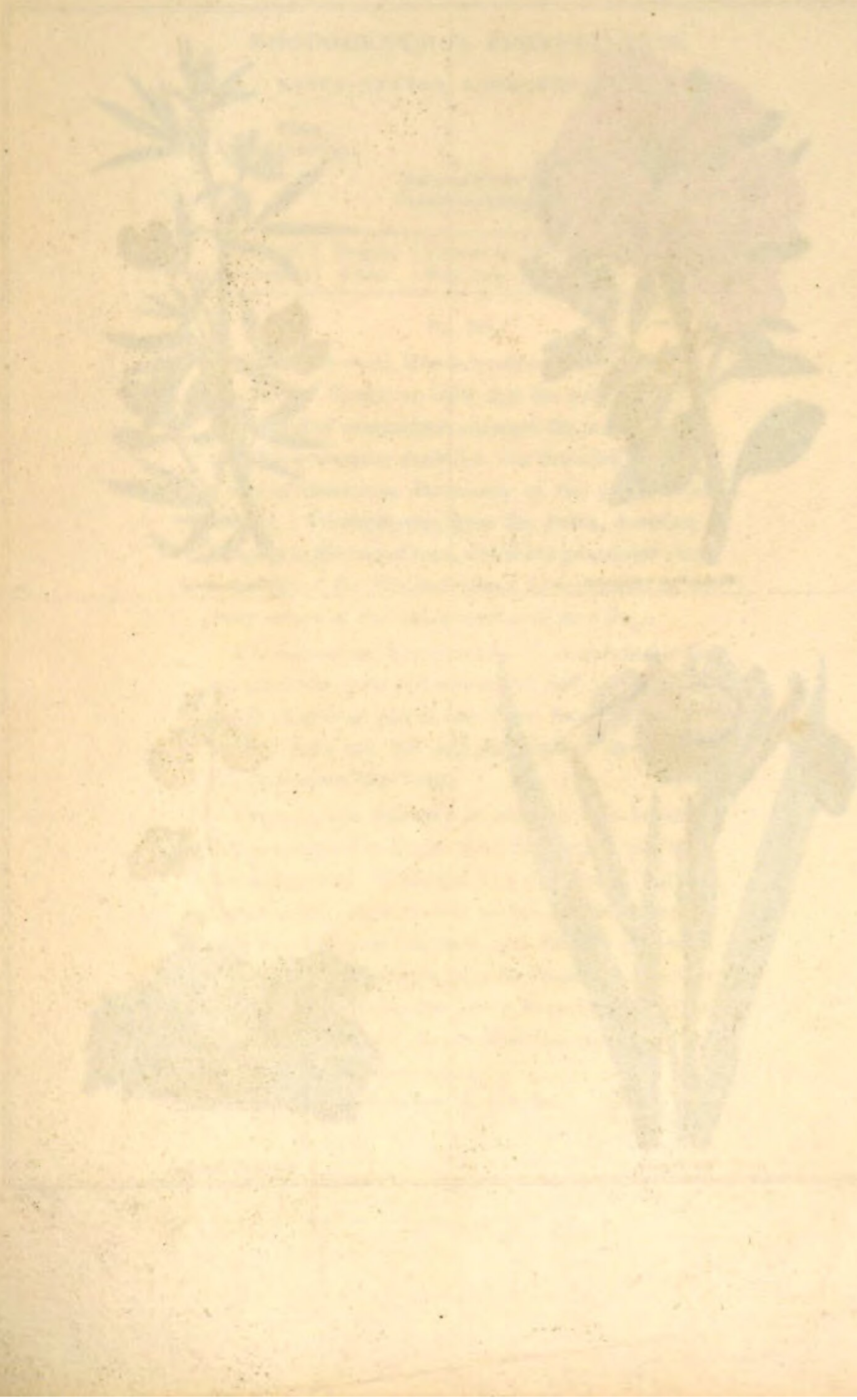
No. 324.

The Greek SIALON, signifying saliva, is the root whence the term Silene has sprung. It was applied to this genus in reference to the viscid fluid which exudes from most of the species. Flies being often entangled in this fluid, gave rise to the English name Catchfly. Maritima, from the Latin, denoting its belonging to the sea.

This plant is common on many parts of the sea coast, particularly in North Wales. Here we gathered seeds of it, and have found it to be one of our most valuable rock plants. In joints, between sandstones, with little or no soil, it luxuriates, and flowers abundantly. It yields a sheet of delicate blossoms, on a dense mass of foliage, far superior to plants of it cultivated in the borders.

It produces great plenty of seeds, and these may be sown in a dry situation, in the spring, or as soon as ripe. If it be desired that the plants should fix themselves amongst stones, the seeds should be sown in such situation, in preference to transplanting. In many situations no care will be required, for having once been planted, it will scatter its seeds, and be produced spontaneously.

Hort. Kew. 2, v. 3, 88.



Rhododendron ferrugineum.

Lotus Jacobæus.

Iris Virginica.

Calceolaria plantaginea.

RHODODEN'DRON FERRUGIN'EUM.

RUSTY-LEAVED RHODODENDRON.

Class.
DECANDRIA.

Order.
MONOGYNIA.

Natural Order.
RHODORACEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Switzerland	2 feet.	May, July.	Perennial.	in 1752.

No. 325.

The Greek word, Rhododendron, literally signifies rose-tree. Hence we infer that the rose constituted a standard of comparison amongst the early Greeks; and this synonyme doubtless was intended to confer a sort of illustrious distinction on the plant which bore it. Ferrugineum, from the Latin, denoting a likeness to the rust of iron, which is a prominent characteristic of the Rhododendron ferrugineum, in the rusty colour of the under surface of its foliage.

Rhododendron ferrugineum, is abundant in the mountainous parts of Switzerland and Austria; and but few ligneous plants are there found at greater altitude than are this and its kindred species, the Rhododendron hirsutum.

There is less difficulty in keeping this beautiful little evergreen in health than the larger species of Rhododendron. If planted in a mixture of peat and loam, on the northern side of tall shrubs, where it may be shaded in summer, and thereby protected from excessive drought, it will require no further care. For increase, the lower branches should be laid in autumn, and they will strike root, and may be taken off after two years.

LOTUS JACOBÆUS.

ST. JAMES'S ISLAND BIRD'S-FOOT TREFOIL.

Class.
DIADELPHIA.

Order.
DECANDRIA.

Natural Order.
LEGUMINOSÆ.

Native of	Height.	Flowers in	Duration.	Introduced
C. Verd. Isl.	18 inches.	Aug. Oct.	Perennial.	in 1714.

No. 326.

The origin of the word Lotus really appears to be too deeply buried in oblivion to admit of even a speculation. All that can be ventured, is the probability of its having been used by the Greeks, after the Egyptians; and it has usually been the name of a vegetable, useful for food, either to man or beast. The trivial name, Jacobæus, is given in allusion to the island on which it was discovered.

This species of Lotus, which is remarkable for its very dark-coloured flowers, has long been cultivated as a favourite green-house perennial. Having put plants of it into the borders, during the summer, we found them succeed admirably. In the following season, we raised seedlings, and put these also into the borders, where they flowered in perfection, during the latter part of the summer. Thus may the Lotus Jacobæus, though a green-house perennial, be cultivated as an annual, and it will constitute a pretty ornament of the open parterre.

Seeds should be planted in March or April, in pots, about two or three in each, and forwarded in a hotbed. In May, they should be turned into the borders without disturbing their roots.

Hort. Kew. 2, v. 4, 394.

IRIS VIRGINICA.

VIRGINIAN IRIS.

Class.
TRIANDRIA.

Order.
MONOGYNIA.

Natural Order.
IRIDEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
N. America.	15 inches.	June, July.	Perennial.	in 1758.

No. 327.

Some persons have conjectured that the word Iris was first used, botanically, in allusion to the eye, which is known by this name in the Egyptian language; there is, however, more probability that the colour of the rainbow gave rise to its use, amongst the ancients, as the name of a plant. Virginica, from Virginia, one of the United States of America, whence, we presume, it was first brought to England.

There is scarcely any genus which affords to the flower garden so extensive a variety of handsome subjects as that of the Iris. From twenty to thirty newly-discovered Irises have been introduced to this country within the last few years, which extend the genus, at the present time, to about eighty distinct species. Their hardy character also yields them additional claims to the notice of those whose chief attention is given to the healthy pursuit of cultivating the open flower garden. Though by far the greater portion of these belong to Europe, still every quarter of the globe has contributed to the gratification of the collector of them.

It may be divided at the root, in spring. An open easterly aspect, and sandy loam, should be preferred.

Hort. Kew. 2, v. 1, 116.

CALCEOLA'RIA PLANTAGIN'EA.

PLANTAIN-LEAVED SLIPPERWORT.

Class.
DIANDRIA.

Order.
MONOGYNIA.

Natural Order.
SCROPHULARINÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Chile.	9 inches.	June, Aug.	Perennial.	in 1826.

No. 328.

Calceolaria, from calceolus, signifying a little shoe, can readily be applied to the flowers of this genus, and consequently is an appropriate appellation. Plantaginea, from plantago, plantain; in allusion to the similar aspect of their leaves.

The winter of 1830-1 was protracted and severe: notwithstanding this, the plant, from which our drawing was made, lived in full exposure; but it should be remembered, that many circumstances combine to preserve a vegetable through severe frosts, which cannot always be commanded; such as congenial soil, in which it may attain its utmost strength; a suitable degree of moisture; being well established in its situation; and also incidents, not recognised by the most attentive cultivator. Taking these circumstances into consideration, it will be advisable with this, as with other new subjects, to give extra protection to one or two plants, that contingencies may be guarded against, and the whole not lost.

The art of protecting our favourites from the effects of cold, should, by no means, be neglected. Such as require this additional care are usually called frame plants; but in cultivation are considered as

belonging to the hardy flower garden, because they never require the agency of artificial heat.

As atmospheric temperature, uninfluenced by altitude, varies, gradually, in proportion as we approach to, or recede from, the equator; so the vegetable products of the earth possess peculiarity of organization adapted thereto. It must not, however, be supposed that vegetables will live only within those degrees of latitude in which they are indigenous, for we see that China and America, from latitudes twenty degrees warmer than our own, have enriched our gardens with splendid subjects; whilst some vegetables, natives only of warm or cold climates, bear open culture in almost every habitable part of the earth.

In accordance with the susceptibility of cold which is shown by exotic plants, when brought under culture, so are they distributed, thus:

Stove plants are those which are chiefly natives of tropical countries. They require continual protection with us; and through our winters, should have a temperature not lower than sixty degrees.

Greenhouse plants, the next class in degree of hardiness, require artificial heat in winter, which should rarely be lower than forty degrees.

Frame plants include such as require the protection of a frame, hand-glasses, or mats, during frost.

Hardy plants comprise all perennials which bear full exposure in winter. These four classes, with their modifications, comprise the gardener's range of temperature.

The Calceolaria plantaginea flourishes in a strong red loam, and cool situation; and yields a plentiful increase by offsets.

Bot. Mag. 2805.

Dahlia superflua. ⅓

Ænothera serrulata. ⅓

Pentstemon ovata. ⅓

Lilium martagon. ⅓

DAHLIA SUPERFLUA.

DAHLIA.

Painted Lady, Anemone-flowered variety.

Class.	*Order.*
SYNGENESIA.	POLYGAMIA SUPERFLUA.

Natural Order.

CORYMBIFERÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Mexico.	4 feet.	Aug. Oct.	Perennial.	in 1789.

No. 329.

As the Dahlia is now become so prominent an object in every flower garden, enriching autumn with a splendour which rivals even June, with its pyramids of roses and midsummer gaieties, we presume that our readers will be gratified by an introduction to so characteristic an individual of that family, as the Painted Lady.

In former notices of the Dahlia, we have endeavoured to give such information as may be most likely to be acceptable to its admirers. Practice, however, yields knowledge, and the dissemination of knowledge, yields pleasure; we shall, therefore, not fail to communicate accounts of any experiments or facts, that may be worthy the notice of those, who are interested in floriculture.

It is thought, by several cultivators, who have paid close attention to the growth of the double dahlia, that some of those of good quality, which were first introduced, are beginning to "wear out," as it is termed. The plants are less luxuriant, and their flowers less perfect. At present we think this a matter of uncertainty; still we wish to call the attention of our friends to the subject, that they may be pre-

pared, the more attentively, to watch the progress of the varieties which they are desirous of perpetuating.

Most persons are anxious to plant portions of the old roots, in spring, under the impression that they produce the strongest plants. The old tubers certainly yield an uninterrupted impulse, in the first stages of the growth of the stem; but those old tubers do not readily decay, to give place to new ones; and the future growth of the plant becomes dependant partly on old, and partly on new roots. We have no doubt but the repeated propagation, by division of such old tubers, is prejudicial to the continued healthy growth of the plant. Instead of this, we would recommend reproduction, by drawing out the shoots from the crown of the plant, as noticed under 306; or, by cuttings made of such young shoots, either of which may be planted separately in pots, and placed in a hotbed or green-house, taking care to shade them, and they will strike root in two or three weeks, and afterwards bear full exposure. Plants, thus raised, produce an entirely new progeny of roots, through the medium of which, there is much reason to believe, the plant is more efficiently nourished than when connected with any portion of the old tubers.

In order to pursue the system of renovation with the greatest convenience, the old roots may be put close together, without pots, into a hotbed. Strew a little soil over them, but they need not be entirely covered. As shoots are produced, so cuttings may be made of them; observing to leave an eye or two of each shoot on the old root, whence a fresh crop will rise, and thus the increase may be extended.

Hort. Kew. 2, v. 5, 87.

ŒNOTHE'RA SERRULA'TA.

SAW-LEAVED EVENING PRIMROSE.

Class.
OCTANDRIA.

Order.
MONOGYNIA.

Natural Order.
ONAGRARIÆ.

Native of	Height.	Flowers in	Duration.	Introduced
N. America.	18 inches.	June, Oct.	Perennial.	in 1821.

No. 330.

The name of this genus, Œnothera, is of Greek origin, from the words OINOS, THERA, in allusion, as stated by Theophrastus, to the roots catching or acquiring the perfume of wine, as they become dry.

The numerous species of Œnothera, which have lately been obtained from America, through the influence of the Horticultural Society of London, and also by private collectors, now constitute this not only an extensive, but an interesting, genus. The largest portion of its species yields bright yellow flowers, which are very showy. Several species produce white flowers, which cannot be considered less beautiful; indeed, their ample delicate silky corollas, with longitudinal semitransparent veins, have generally acquired for them particular attention.

Our present subject, which is native of the hills of the interior of North America, is not of so showy a character as some others. Cuttings readily strike root. They make the best plants when taken in May or June, and planted under a hand-glass. If artificial heat can be given them, their growth is the more certain, as well as more rapid. A rather dry situation should be chosen.

Hooker's Ex. Flor. 140.

PENTSTEMON OVATA.

OVAL-LEAVED PENTSTEMON.

Class.
DIDYNAMIA.

Order.
ANGIOSPERMIA.

Natural Order.
SCROPHULARINÆ.

Native of	Height.	Flowers in	Duration.	Introduced
N. America.	4 feet.	June, Aug.	Perennial.	in 1827.

No. 331.

Pentstemon, see No. 316. Ovata, egg-shaped, a term used in allusion to the shape of the root leaves.

This beautiful species of Pentstemon, and nearly twenty others, were collected in the years 1826-7, by Mr. David Douglas, who is employed by the London Horticultural Society. He was first sent to America, in the year 1823, and his zeal and industry have been fully commensurate with the expectations of the Society, whose collection of hardy plants he has greatly enriched.

The Pentstemon ovata may be divided at the root for increase; but to render this practice the more available, in consequence of the young offsets being mostly produced immediately at the surface of the soil, it is requisite that they be occasionally moulded up, to cause their emission of roots; or they will, sometimes, be found merely as branches of the parent stem, similar to the bottom shoots of the carnation. Should this not have been previously attended to, and is requisite in autumn, it may then be performed, and the offsets will throw out roots in the spring; after which they may be divided, and planted out for flowering. It may also be raised from seeds.

Bot. Mag. 2903.

LI'LIUM MAR'TAGON.

PURPLE MARTAGON.

Class.
HEXANDRIA.

Order.
MONOGYNIA.

Natural Order.
TULIPACEÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Germany.	4 feet.	June, July.	Perennial.	in 1596.

No. 332.

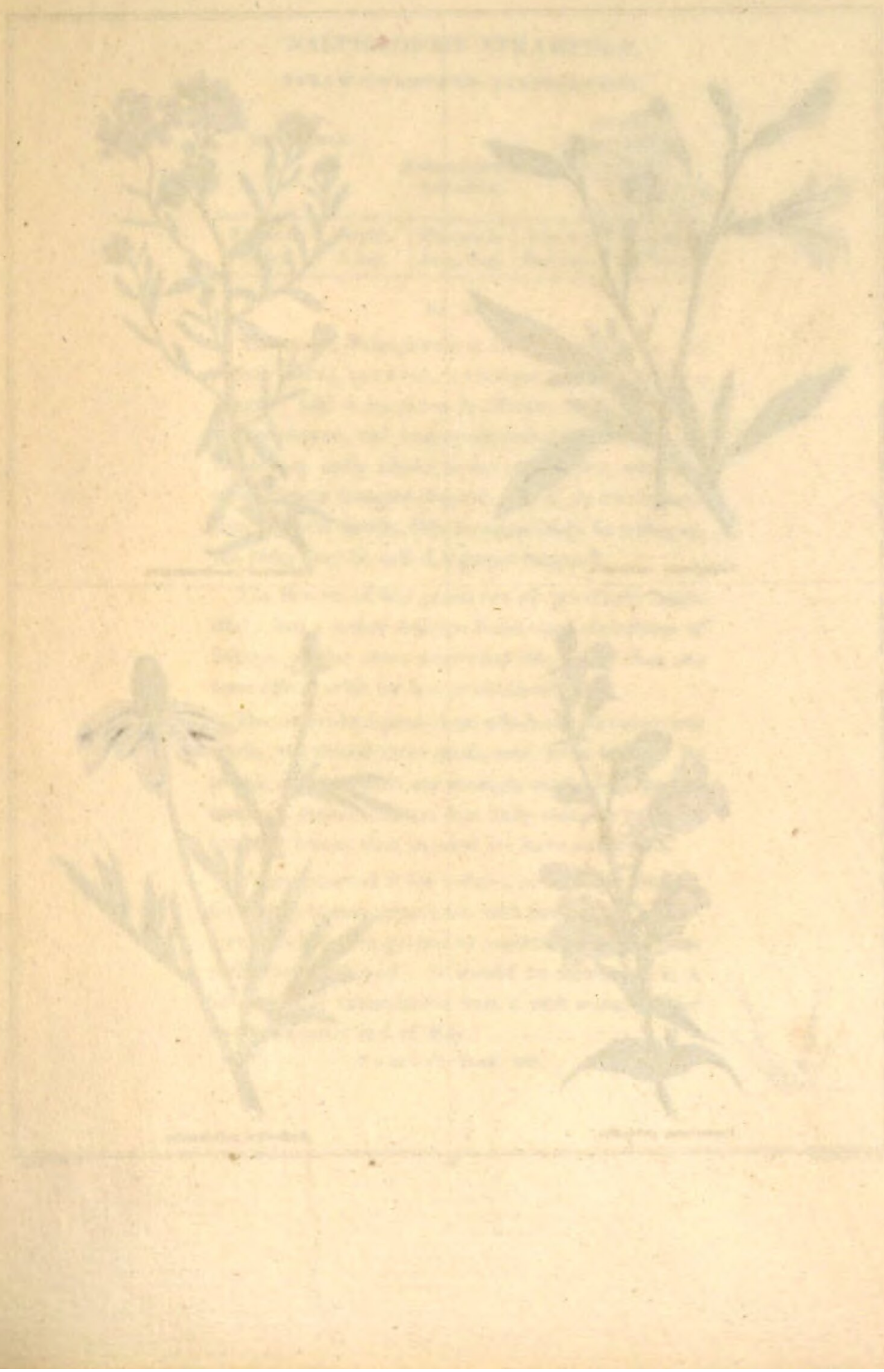
The word Lilium, is derived from the Greek LEIRION, as noticed under 292. Or, agreeably to some authorities, from the Celtic Li, signifying whiteness.

The Purple Martagon has been known to almost every one who has lived within the last three centuries, possessed of the blessing of a few yards of his native country, to call a garden.

The most striking beauty, when frequently presented to the eye, loses its power of engaging our attention. Were this not the fact, the peculiar elegance of the Martagon would continue an object of admiration to every individual of cultivated mind. Its stately upright pillar, decked above, like an eastern pagoda; and ornamented below, by whorls of uniform foliage, render it a profitable subject of contemplation for the artist, whose taste should be founded on beauty. This quality is never sought for in vain amongst the products of nature.

The Purple Martagon flourishes in any common garden ground. The only subject to which the cultivator's attention requires to be directed, is that of never disturbing the bulbs of any species of lily whilst in a state of active vegetation.

Hort. Kew. 2, v. 2, 242.



Salpiglossis stramínea. ½

Æthionema membranaceum. ⅔

Pentstemon pulchellus. ⅔

Rudbeckia columnaris. ⅔

SALPIGLOS'SIS STRAMI'NEA.

STRAW-COLOURED SALPIGLOSSIS.

Class.
DIDYNAMIA.

Order.
ANGIOSPERMIA.

Natural Order.
SOLANEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Chile.	2 feet.	June, Sep.	Perennial.	in 1824.

No. 333.

The name, Salpiglossis, is compounded from two Greek words, SALPIGS, a trumpet; and GLOSSA, a tongue; said to be given in allusion to its trumpet-shaped flower, and tongue-shaped style. We think it may, as aptly allude to the style alone, which is more clearly trumpet-shaped; and if, by its connection with the flower, this be assumed to be a tongue, the plant may be called trumpet-tongued.

The flowers of this genus are all peculiarly beautiful; but a rather delicate habit, and deficiency of foliage, render them somewhat less showy than are some others with far less pretensions.

The individual plant from which our drawing was made, was raised from seeds, sent from Chile. Its purple stripes, which are strongly marked on the exterior of the corolla, are but little seen on its inner surface; less so than in some we have examined.

We recommend it for culture, as a tender annual; for though it may sometimes, with protection, be preserved in the open ground as a perennial, it will generally be destroyed. It should be forwarded in a hot-bed, and transplanted into a rich warm border about the latter end of May.

ÆTHIONE/MA MEMBRANA'CEUM.

MEMBRANOUS-PODDED ÆTHIONEMA.

Class.
TETRADYNAMIA.

Order.
SILICULOSA.

Natural Order.
CRUCIFERÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Persia.	1 foot.	July, Sept.	Perennial.	in 1829.

No. 334.

We cannot, with certainty, state the precise idea intended to be conveyed by this compound word, Æthionema. It is supposed to be founded on the Greek AITHO, to scorch; and NEMA, a thread, or stamen; on account of a brown tinge on the stamens. The name was instituted by Decandolle; and it is much to be regretted that every author, who either adopts an old term, or makes a new one, does not record his motive for its application. The specific name, membranaceum, is given in allusion to the membranous wings of the seed-pods.

This is a small neat herbaceous plant, which was raised from Persian seeds, imported by the late Mr. Barclay, of Bury Hill. From his collection it was introduced to the garden of the Birmingham Botanical and Horticultural Society, whence we were favoured with our specimen.

This society, being at present in its infancy, is probably unknown to many of our readers; but every well-wisher to the dissemination of refined taste, to say nothing of moral feeling arising out of it, will gladly recognise this addition to the many public establishments of a similar nature. Such societies

stand as the ornaments of our country, and the evidence of an increased and increasing thirst after that knowledge which exists, unmixed with the baser passions of human nature. To live in the present day, unconscious of the effects of divine wisdom, so palpably displayed in every object that is presented to man's senses, betrays little less than an inexcusable, self-satisfied, ignorance. The rising institutions, both charitable and scientific, established in Birmingham, show that its inhabitants recognise such sentiment, and are active in its diffusion.

On reference to Mr. Loudon's great depositary of knowledge, his Encyclopædia of Gardening, we find that the dimensions of the principal botanic gardens of Great Britain, are as follow: London thirty-three acres; Dublin thirty; Edinburgh and Manchester sixteen each; Glasgow eight; Cork six; Liverpool, Hull, Oxford, and Cambridge, five acres each; Chelsea, and Bury St. Edmunds, three each. The garden of the Birmingham society occupies sixteen acres. Thus its relative importance, as regards dimensions, is at once seen. For the variety and the fitness of its surface, aspect, and soil; its supply of water; and position, as part of a richly varied landscape, we believe it inferior to none. Its progress, under the management of an active committee, and a most skilful curator, Mr. D. Cameron, on plans of Mr. Loudon, is indeed, most auspicious.

The Æthionema membranaceum has proved quite hardy, and is suitable to the front of the parterre; or, from its procumbent habit, to adorn artificial rock-work. It may be propagated from seeds or cuttings, and should have a warm and rather dry situation.

Sweet's Fl. Gard. s. 2, 69.

PENTSTE/MON PULCHEL/LUS.

PRETTY PENTSTEMON.

Class.
DIDYNAMIA.

Order.
ANGIOSPERMIA.

Natural Order.
SCROPHULARINÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Mexico.	2 feet.	June, Sept.	Perennial.	in 1826.

No. 335.

This generic name has been noticed. Pulchellus, from the Latin, signifying pretty; which is quite applicable to this species; but for every Pentstemon the same distinction may be claimed.

Since our publication of Pentstemon atropurpureus, we have raised numerous seedlings from that species; and some of them, in flower, approach Pentstemon pulchellus. They vary considerably in their depth of colouring, and somewhat also in shape.

It has been stated, by some authors, that the seeds of no species of Pentstemon will vegetate under the influence of artificial heat, an opinion which we mentioned under No. 275, but were not then prepared either to verify or contradict it. In March last we sowed seeds of the Pentstemon atropurpureus, and also of Pentstemon roseus, in pots, and placed them in a rather warm hotbed, and many vegetated freely. However, after the pots had been removed from the hotbed, a further produce of young plants, of each species, took place, partially corroborating the opinion alluded to. The first crop of plants are now, November, in full bloom. The second crop remained weakly, and were not preserved.

Bot. Reg. 1138.

RUDBECKIA COLUMNARIS.

COLUMNAR RUDBECKIA.

Class.
SYNGENESIA.

Order.
FRUSTRANEA.

Natural Order.
COMPOSITÆ.

Native of	Height.	Flowers in	Duration.	Introduced
N. America.	3 feet.	Aug. Sept.	Perennial.	in 1811.

No. 336.

Rudbeckia, from Rudbeck, the name of two celebrated Swedish botanists. Columnaris, from the cylindrical or columnar receptacle of the flower.

Through the nicer distinctions made by recent botanists, the old genus, Rudbeckia, has suffered a little amputation. Out of its severed members, two genera have been established by Mr. D. Don. The one Echinacea, the other Centrocarpha, leaving Rudbeckia restricted to such species only as have divided leaves and elongated cylindrical receptacles.

As no generally acknowledged specific rules are laid down, by which to restrict the botanist in his subdivision of groups of plants, to form genera, the natural consequence is, that as science progresses, as men acquire greater botanical penetration, so will the division of received groups be continued. It will prevail partly from an impression of benefit rendered to science, and partly from the pride of acute discrimination.

The Rudbeckia columnaris does not increase so freely at the root as some others, but will admit of separation every second year. A light loamy soil is congenial to its growth.

Loudon's Ency. of Plants, sp. 12462.

Maurandia Barclayiana. 1/3

Lupinus mutabilis. 1/3

Œnothera speciosa. 1/3

Dielytra eximia. 1/3

MAURAN'DIA BARCLAYIA'NA.

BARCLAY'S MAURANDIA.

Class.
DIDYNAMIA.

Order.
ANGIOSPERMIA.

Natural Order.
SCROPHULARINÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Mexico.	12 feet.	May, Nov.	Perennial.	in 1826.

No. 337.

This inestimable addition to our limited list of climbing plants, bears the names of two eminent encouragers of botany, Dr. Maurandy, Professor of Botany at Carthagena; and Robert Barclay, Esq. late of Bury Hill, Surry.

Mr. Barclay, whose death occurred in 1830, was amongst the most zealous encouragers of the cultivation of ornamental plants and edible vegetables. Possessed of ample means, acquired by extensive commercial pursuits, united to a liberal mind, he became not only an active supporter of botany, and of natural history in general, but also, it may justly be said, the liberal patron of all scientific pursuits. Mr. Barclay greatly aided the cause of botany by making himself the centre of vegetable exchange. He maintained a constant correspondence with eminent botanists of the European continent, North and South America, Islands of the Indian Ocean, and other intermediate countries. He liberally supplied them with such plants, seeds, and fruit trees, as their respective situations demanded; and they, in return, transmitted him riches of the temperate or torrid zones, as their several localities afforded opportunity.

The plants thus acquired, Mr. Barclay submitted to judicious management; and their increase enabled him to distribute them from zone to zone, and from hemisphere to hemisphere. Thus he gave to distant countries, and to his own, the advantages which claim for him the gratitude of mankind.

The Maurandia Barclayiana is a most splendid addition to our ornamental climbers; and if this were the only plant for which English botanists had to be grateful to its introducer, the debt could not be esteemed inconsiderable. It grows with great luxuriance in the border, during summer, and may be trained up a wall, or on trellis work. In the absence of these advantages, for its support and display, it may be very effectually cultivated amongst other herbaceous plants, or low flowering shrubs, simply by training it up common pea sticks, on which it will luxuriate and produce its wonted profusion of brilliant blue flowers, till prevented by the severe weather of autumn.

Its seeds should be sown early in the spring, in a hotbed, and the young plants be forwarded by being potted, singly, in rich soil. They should be gradually inured to bear the open air, by having free exposure to it during the day-time. These plants may be turned out of the pots, into the open ground, at the end of April, and they will soon grow rapidly, and flower freely. If house protection can be afforded young plants of the Maurandia Barclayiana, during winter, they will acquire strength, and on being turned into the borders in April or May, they will become stronger, and blossom earlier in the summer, than spring seedlings.

Bot. Reg. 1108.

LUPI'NUS MUTA'BILIS.

CHANGEABLE LUPINE.

Class.
MONADELPHIA.

Order.
DECANDRIA.

Natural Order.
LEGUMINOSÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Bogota.	5 feet.	July, Oct.	Perennial.	in 1825.

No. 338.

The word Lupinus, from lupus, a wolf, has been thought, by some authors, to allude to the plant being sometimes eaten by wolves; but the vegetable is more generally understood to have borne some fancied comparison with the animal, from the devastation occasioned by its rapidly spreading over the soil. Mutabilis, from the Latin, changeable; expressive of the mutability of its colours.

The flowers of this handsome Lupine are delightfully fragrant; and their inconstancy of colour is probably not fully known. Our figure shows their usual colouring; opening white, attaining partial shades of yellow, and ultimately, tints of purple; still we have seen plants, from imported seeds, with flowers much darker.

Though naturally a tender perennial, this Lupine may be most successfully cultivated as a half-hardy annual. Forward the young plants in a hotbed, and turn them into the borders in May: they will ornament the garden till unrelenting frosts stop short their gay existence. Autumn-raised plants, protected through the winter, seldom attain the luxuriance of those raised in spring.

Sweet's Fl. Gard. 130.

ŒNOTHE'RA SPECIO'SA.

SHOWY ŒNOTHERA.

Class.
OCTANDRIA.

Order.
MONOGYNIA.

Natural Order.
ONAGRARIÆ.

Native of	Height.	Flowers in	Duration.	Introduced
N. America.	$2\frac{1}{2}$ feet.	June, Sep.	Perennial.	in 1821.

No. 339.

For the derivation of the word Œnothera, see No. 163. Speciosa, from the Latin, signifying handsome, or showy.

Were vegetable beauties not held perfectly innocent of any trait of that vanity, which cynics pretend to discover in beauties of another sphere of creation, the Œnothera speciosa would stand accused by the same illnatured philosophers, of quitting its rightful domicil the better to display its attractions.

Unconscious of its habit, we first planted it in spring, in a soil that was light and rich: the consequence was that by autumn it had travelled several feet in each direction, by the agency of underground shoots. It then obtrusively sprung up in the acknowledged habitations of its neighbours, only to meet a decisive ejectment. The best practice, therefore, is to plant it in a pot, which may be sunk in the border. It should then be repotted every spring, in preference to any other season.

This is a strongly marked variety of Nuttall's plant. The latter has not been observed to perfect seeds in this country, whilst ours produces them freely.

Hooker's Ex. Flor. 80.

DICLY'TRA EXIM'IA.

CHOICE DICLYTRA.

Class.
DIADELPHIA.

Order.
HEXANDRIA.

Natural Order.
FUMARIACEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
N. America.	18 inches.	June, Aug.	Perennial.	in 1812.

No. 340.

Diclytra is compounded of the two Greek words, DIS, twice; and KLYTRON, a sheath. The word is applied to this genus in allusion to the two sheaths, or protuberances, of the base of the corolla. Eximia, from the Latin, signifying choice, or select.

The genus Fumaria, as originally established, included not only the plants which it now comprehends, but also those of Corydalis, Diclytra, and two or three minor genera; indeed the whole of the natural order, Fumariaceæ, depended on it. The generic name, Diclytra, explicitly distinguishes its own species from most others of the Fumariaceæ, in consequence of these having but one spur, or 'prominence at the base, in lieu of two.

This is a desirable herbaceous plant for the flower border, not in reference to its blossoms alone, but also from its compact and neat foliage. Its flowering stems vary considerably in comparison with its leaves. They are taller as the season advances.

A dry situation is usually thought best for it, but we have it in a light soil and rather moist situation, where it grows with exuberance. We prefer dividing it in spring.

Bot. Reg. 51.

Erythræa aggregata. ½

Erpetion reniformis. ½

Anagallis Webbiana. ½

Claytonia Sibirica. ½

E. D. Smith del.

S. Watts sculp.

ERYTHRÆ'A AGGREGA'TA.

AGGREGATE ERYTHRÆA.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
GENTIANEÆ.

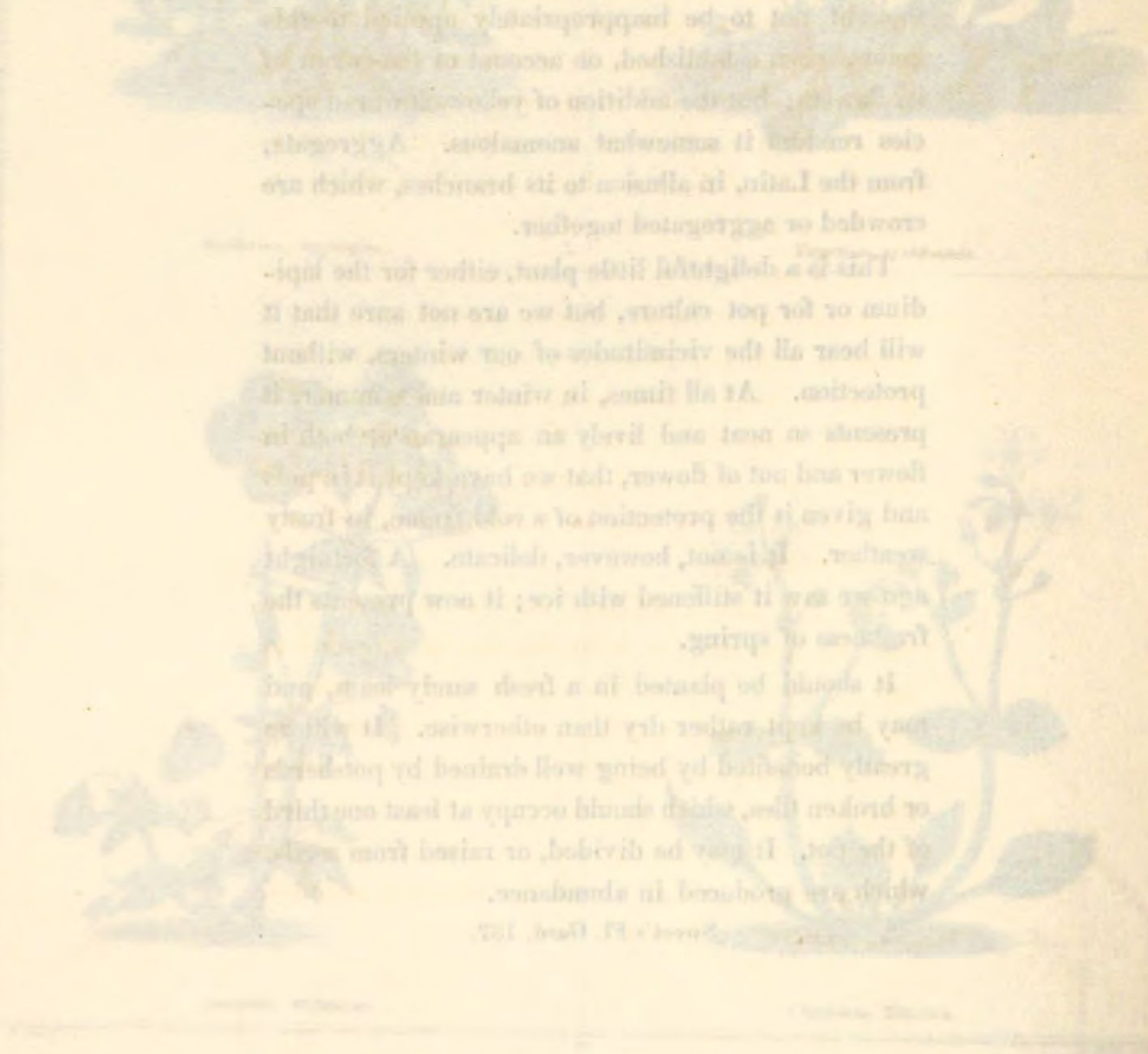
Native of	Height.	Flowers in	Duration.	Introduced
Nepaul.	3 inches.	Apr. Sept.	Perennial.	in 1824.

No. 341.

The Greek ERUTHROS, signifying red, was thought not to be inappropriately applied to this genus, when established, on account of the colour of its flowers; but the addition of yellow-flowered species renders it somewhat anomalous. Aggregata, from the Latin, in allusion to its branches, which are crowded or aggregated together.

This is a delightful little plant, either for the lapidium or for pot culture, but we are not sure that it will bear all the vicissitudes of our winters, without protection. At all times, in winter and summer, it presents so neat and lively an appearance, both in flower and out of flower, that we have kept it in pots and given it the protection of a cold frame, in frosty weather. It is not, however, delicate. A fortnight ago we saw it stiffened with ice; it now presents the freshness of spring.

It should be planted in a fresh sandy loam, and may be kept rather dry than otherwise. It will be greatly benefited by being well drained by potsherds or broken tiles, which should occupy at least one third of the pot. It may be divided, or raised from seeds, which are produced in abundance.



ERPE'TION RENIFOR'MIS.

SPURLESS VIOLET.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
VIOLARIEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
N. Holland.	2 inches.	May, Sept.	Perennial.	in 1825.

No. 342.

Erpetion, from the Greek ERPETOS, trailing; and ION, a violet; a name compounded to denote the existence of the little runners which are produced by the Erpetion, and also its connexion with the violet, one of which it was formerly considered. Reniformis, is deduced from the Latin ren, the kidneys; in allusion to its kidney-shaped leaves.

The Violet is so general a favourite, and its name the subject of so many pleasing associations, that it becomes a matter of regret, that our modest little flower, so nearly allied to it, should have been discharged from the genus. It is a neat little plant, suitable for a pot, or for planting in a raised border or mount, where it may be more immediately presented to the eye.

The Erpetion reniformis, may be divided at the root, for increase; or, if its runners be attended to, and fastened down to the soil, its increase may be greatly facilitated; and the young plants thus obtained, will bear the severity of the winter with less injury than old plants. It may be raised from seeds also, which, if sown as soon as ripe, in pots, and protected during winter, will flower in the following summer.

Sweet's Fl. Gard. 170.

ANAGAL'LIS WEBBIA'NA.

WEBB'S PIMPERNEL.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
PRIMULACEÆ.

Native of S. Europe.	Height. 3 inches.	Flowers in May, Oct.	Duration. Perennial.	Introduced in 1828.

No. 343.

The word, Anagallis, is derived from the Greek. It is from ANAGELAO, to laugh, as it was supposed to cure the spleen and despondency. The term, Webbiana, is used in honour of P. B. Webb, Esq. who discovered it in his travels, and sent it home to his residence at Milford, Surry.

The very name, Anagallis, as connected with our "pink-eyed" Pimpernel, excites a feeling of interest and regard. Every body knows the Poor Man's Weather Glass, and looks for its little scarlet flowers, brightly glowing, or in quiet repose, at the foot of the ripening corn stalk. Our present species too, is equally interesting, and equally humble. It is always prostrate, and claims the kind hand of the florist to give it support. Cowper felt for all nature's children. He could sympathize with all. He says,

> "Few self-supported flowers endure the wind
> Uninjured, but expect the upholding aid
> Of the smooth shaven prop; and, neatly tied,
> Are wedded thus, like beauty to old age,
> For interest's sake, the living to the dead."

The Anagallis Webbiana is not so susceptible of atmospheric vicissitudes as the Anagallis arvensis,

or Pimpernel, to which we have alluded. The latter plant is proverbially so; opening in fine weather and closing before rain. But as the atmosphere has not at all times the same degree of pressure or humidity to indicate its changes, so can neither the Pimpernel, the barometer, nor hygrometer, prove an infallible prognosticator. The Pimpernel and some other flowers open and close at a stated time; hence a vegetable clock has been formed; which has been delightfully alluded to by Mrs. Hemans.

"'Twas a lovely thought to mark the hours,
As they floated in light away,
By the opening and the folding flowers,
That laugh to the summer's day.

Thus had each moment its own rich hue,
And its graceful cup or bell,
In whose coloured vase might sleep the dew,
Like a pearl in an ocean-shell.

To such sweet signs might the times have flow'd
In a golden current on,
Ere from the garden, man's first abode,
The glorious guests were gone.

Yet is not life in its real flight,
Marked thus—even thus—on earth,
By the closing of one hope's delight,
And another's gentle birth.

Oh! let us live, so that flower by flower,
Shutting in turn, may leave
A lingerer still for the sunset hour,
A charm for the shaded eve."

The Anagallis Webbiana may be increased from seeds, or cuttings. The latter should be covered with a glass, and have a little bottom heat.

CLAYTO'NIA SIBI'RICA.

SIBERIAN CLAYTONIA.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
PORTULACEÆ.

Native of Siberia.	Height. 4 inches.	Flowers in June, Aug.	Duration. Perennial.	Introduced in 1768.

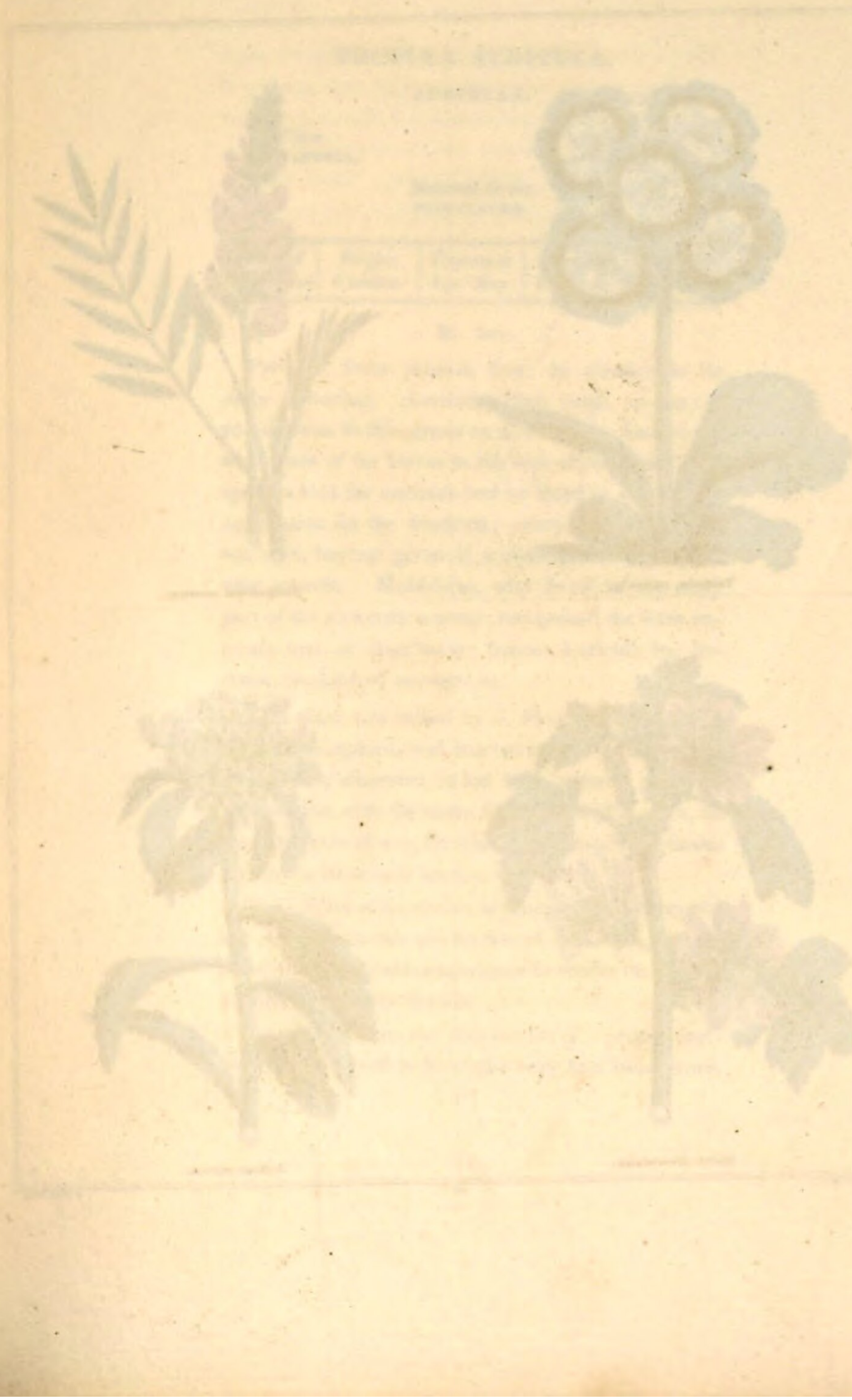
No. 344.

Doctor Thomas Clayton, after whom this genus was named, took his degree of M. D. at the University of Oxford, a little before the close of the seventeenth century. He afterwards went to Virginia, and became a correspondent of the London Philosophical Society.

The Claytonia Sibirica is not possessed of showy character; but, if its pretensions to such be small, its demands on our services are proportionately inconsiderable. It grows freely in shady situations, and will increase spontaneously by its seeds, particularly where they happen to fall amongst thrift or similar plants, which form a good winter protection.

An eastern aspect appears to us particularly well suited to this plant; and if the soil be not tolerably cool and moist, a protection to its roots, from drought, may readily be effected by the addition of stones to the border wherein it is planted. Stone borders, will, we trust, ere long, be duly appreciated. The addition of these rocky appendages, which may be formed almost without expense, equally afford both winter and summer protection, at the same time as they may be made to yield both variety and ornament.

Hort. Kew. 2, v. 2, 53.



Primula auricula. ½

Hedysarum roseum. ½

Malva Mauritiana. ½

Sedum aizoon. ½

PRIMULA AURICULA.

AURICULA. **Fletcher's Mary Ann.**

Class.	*Order.*
PENTANDRIA.	MONOGYNIA.

Natural Order.
PRIMULACEÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Switzerland	6 inches.	Apr. May.	Perennial.	1597.

No. 345.

Primula, from primus, first; in allusion to its early flowering. Auricula, from auris, an ear; a name given to this genus on account of a fancied resemblance of its leaves to the ears of an animal. It appears that the ancients had no fixed or established appellation for the Auricula; every one, as Parkinson says, having given it a name according to his own conceit. Matthiolus, who lived in the early part of the sixteenth century, recognized the term auricula ursi, or Bear's-ear; hence, Auricula has become established amongst us.

This plant was raised by J. Fletcher of Hockley, near Birmingham, and has never failed to take the first prizes, wherever it has been shown; unless in competition with the same florist's Ne plus ultra, an incomparable flower, for which he refused ten guineas a plant in its second season.

The culture of Auriculas, as practised by florists who are eminent for the production of first-rate flowers, requires considerable experience to render its votaries proficient in all its details.

By many florists the preparation of a proper compost is considered to be of the very first importance.

That a rich, wholesome, porous, soil should be used, we allow, but the utility of a multifarious medley of anomalous ingredients is doubted by the most eminent growers in the kingdom; and the danger of an improper use of them is known to all. Those who advocate the use of sugar scum, blood, and manure of various descriptions, are well aware that such ingredients cannot be safely employed, till they have remained about two years to decay; or, in other words, till all their pernicious qualities have been subdued by new combinations of their active principles, and the mixture is become simply such as may have been readily compounded from the usual soils and manure of almost every garden.

It is most likely that all the properties of animal matter which can be turned to good account, in the excitement of the Auricula, are conveniently obtained in bone dust. This possesses such oleaginous, and other substances as may be serviceable to vegetable life. Its decomposition is slow, and its volatile alkali, in consequence, is not too rapidly evolved. By the addition of a very small quantity of lime, its unctious matter may be decomposed and fitted for the immediate use of the plant; and carbon would also be imbibed from the atmosphere. The slowness of its decomposition, yields great advantage, by the longer continuance of its stimulus.

Fresh loam, which has been prepared from turf, by laying it together till its grass and roots are decayed; well rotted hotbed manure; decayed leaves, or the vegetable powder from the inside of a hollow tree; with drift sand and bone dust. These are the requisites for a superior compost.

Hort. Kew. 2, v. 1, 309.

HEDYS'ARUM RO'SEUM.

ROSE-COLOURED HEDYSARUM.

Class.
DIADELPHIA.

Order.
DECANDRIA.

Natural Order.
LEGUMINOSÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Siberia.	18 inches.	July, Aug.	Perennial.	1803.

No. 346.

The derivation of the term Hedysarum, is found in the Greek EDUS, sweet, and AROMA, the scent of flowers. Roseum, from the colour of the flower.

This plant is ornamental, and very hardy, and will grow in any common soil. It merely requires tying up, once in a season, and its flowering stems will then continue upright, and have a neat appearance.

It is nearly allied to the well-known British species, Hedysarum onobrychis, or Sainfoin; a plant, which, in some of the gravelly and chalky soils of England, is found to be of great advantage to the agriculturist. Young, in his Annals of Agriculture, and Martyn, in his Miller's Dictionary, strongly advocate the culture of Sainfoin. The latter author has drawn a comparison between the profits of Sainfoin and Turnips; and, although his deductions are somewhat incomprehensible, sufficient is shown to prove, that on poor lands, where chalk and gravel prevail, Sainfoin may be profitably cultivated.

The increase of Hedysarum roseum, when left two or three years undisturbed, is not apparently great, but it will be found to admit of many divisions. This should be performed when it begins to shoot.

Loudon's Ency. of Pl. 630.

MALVA MAURITIANA.

MAURITANIAN MALLOW.

Class.
MONADELPHIA.

Order.
POLYANDRIA.

Natural Order.
MALVACEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
S. Europe.	6 feet.	June, July.	Annual.	1768.

No. 347.

The word Malva, is used in allusion to the emollient qualities of the plant, and is derived from the Latin mollis, soft. Mauritiana, from Mauritius, whence it is said to have been brought to England by John Earl of Bute.

This is a tall handsome annual, suitable for the backs of borders, the centre of mounts, or for mingling with low shrubs in the pleasure ground. Its flowers are somewhat variable in their depth of colouring. We have given the delineation of a single corolla, from a less coloured variety; and its tints will usually be found to be near the one or the other, or varying between them.

We had a plant of this species of Mallow, which did not flower in the first season of its growth; it lived, uninjured, through the winter, and in the succeeding summer, grew to an incredible size, bearing a profusion of showy flowers. Hence it may be inferred, that if seeds be sown a month or two later than usual, the same change of habit may be secured. A slight winter protection would render success more certain. For flowering in the first season, it should be sown in the borders, in March.

Hort. Kew. 2, v. 4, 216.

SE'DUM AIZOO'N.

YELLOW STONE-CROP.

Class.
DECANDRIA.

Order.
PENTAGYNIA.

Natural Order.
CRASSULACEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Siberia.	1 foot.	July, Sept.	Perennial.	1757.

No. 348.

Sedum is deduced from the Latin sedere, to sit, from the closeness with which most of these plants are attached to rocks and dry places. The term savours of an old author's whim, who saw that his sedum had no leg to stand upon. Aizoon, from the Greek AEI, always, and ZOON, alive; a name formerly applied to this and some others of the same genus, from their existing in defiance of aridity.

A collection of succulent plants assumes a far more interesting group than would at first be conceived from the possession of a few species only. Their peculiarity of conformation, and their almost obstinate attachment to life, under circumstances which would be total destruction to other plants, render them objects of curiosity.

It would appear as though many species of Sempervivum, Sedum, Cotyledon, Cactus, and others of the Crassulaceæ, grew independently of the grosser elements, earth and water. It is true that some of them will exist for months in the absence of both. Natives, as many of the Cacteæ are, of the rocks of South America, they meet a scanty supply of either; and indeed, our own Sempervivum tectorum, or

common houseleek, attached to a cottage tiling, furnishes a familiar example of fleshy or succulent plants withstanding the effects of drought.

This economy, wisely bestowed on such as are natives of hot countries, is effected by a peculiar formation of their skin, or cuticular covering; which, as Sir J. E. Smith expresses it, constitutes "a fine, but essential barrier between life and destruction." The cuticle of leaves is, in general, so formed as to admit of absorption, and very ready exhalation; the upper surface of the leaf performing the offices of the former, and the lower surface of the latter. How frequently do we see the vegetable embellishments of the balcony faint under the heat of summer, when left to the care of the hand that neglects them; and the mown grass,—the verdure and freshness of the lawn, is quickly withered and dried. But with the succulent tribe of plants, this cannot so easily occur; for independent of their greater quantity of fluid, their cuticle does not admit its ready evaporation; it is protected as in a bottle. But although these juices are prevented by so thin a membrane, from escaping, still that same membrane easily admits the admission of moisture; miser-like, it is ready to accumulate but not to distribute. A gathered leaf will remain long before it becomes flaccid and withered; but when it is in that state, if put into water, it quickly regains its wonted plumpness; which yields a clear proof of the peculiar properties of its covering; or, of the internal organization of this curious tribe.

The Sedum aizoon may be divided at the root. Ere long we hope to resume the subject.

Hort. Kew. 2. v. 3, 112.

Glaucium phœniceum. ½

Phlox paniculata. ½

Lobelia bicolor. ⅓

Coreopsis tripteris. ½

GLAU'CIUM PHŒNI'CEUM.

RED-FLOWERED HORN-POPPY.

Class.
POLYANDRIA.

Order.
MONOGYNIA.

Natural Order.
PAPAVERACEÆ.

Native of	Height.	Flowers in	Duration.	Inhabits
England.	2 feet.	June, July.	Annual.	Sandy fields.

No. 349.

The origin of the word Glaucium, is found in the Greek GLAUKOS, signifying greenish; or more strictly, in the original, greyish. Phœniceum, in the Latin, purple; but the Greek word PHOINIKEOS, has reference to blood, and its colour.

This genus of plants was the Chelidonium of Linneus, and Papaver of old authors. Gerard, however, says, "That by the concordance of all authors, for the most part, it is the true and legitimate Glaucium of Dioscorides." It is the Glaucium corniculatum of De Candolle.

When in flower, its appearance has a strong affinity to the type of the natural order to which it belongs,—the Papaver, or Poppy; its seed vessel forms the principal difference.

It is thought to contain some of the narcotic properties of the Papaver somnifera, from which the opium of commerce is prepared. Pomet, a French author, in his History of Drugs, asserts that the Turks use the juice of the Glaucium to mix with that of the Poppy, and thereby make an inferior opium.

Though the Glaucium, grown in Asia, may possess considerable properties as a narcotic, it may not

be so evidently its character in northern climates, for it is asserted that the opium of Eygpt is stronger than any produced north of the Mediterranean; that the Turkish is stronger than French; and French than English. This opinion must, however, be received with caution, for in this country, opium has been produced, which was proved to contain all the narcotic properties of the foreign drug, and that too, without its impurities.

The influence of climate on the medicinal qualities of some vegetables, has been incontrovertibly proved to be great. Dr. Paris says that, "Senna by transplantation from Arabia into the south of France (Provence) assumes a marked change in its physiognomy and virtues, its leaves are more obtuse, and its taste less bitter and nauseous than the pointed leaved variety, while its effects will be found to be less purgative. Cruciform plants degenerate within the tropics, but acquire increased energies, as Antiscorbutics, in cold regions; the Menthæ have not so penetrating an essential oil in the south of Europe as in England and in the north of France. The relative proportions of gluten vary in the wheat of different countries, and as in the south of Europe, its quantity greatly predominates over the other principles, we at once discover the cause that gives such excellence to the Maccaroni of Italy. Many species of plants secrete juices in warmer regions, which are unknown in their œconomy, in colder climates; thus the Ash yields Manna in Calabria, but loses that faculty as it advances towards the north."

Glaucium phœniceum is a doubtful native. It may be sown in the borders in April.

Hort. Kew. 2, v. 3, 288.

PHLOX PANICULA'TA.

WHITE PANICLED PHLOX.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
POLEMONIACEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
N. America.	5 feet.	Aug. Sept.	Perennial.	in 1813.

No. 350.

The derivation of the word Phlox, we have had previous occasion to notice. Paniculata, a botanical term, used in reference to a mode of flowering in which the partial footstalks are variously subdivided, as exemplified in the plant before us.

In addition to the white variety, which we now give, of Phlox paniculata, there is also a purple one, which was brought from America many years previously. They are extremely handsome autumn-flowering plants, which on account of their very showy character, should occupy a prominent place, whether it be in the shrubbery or in the flower garden. When in full gaiety they exhibit one continuous dress of delicate blossoms.

It will often occur, particularly in light and partially peaty soils, that the Phlox paniculata so far exhausts the earth of the stimulating qualities necessary for its luxuriant growth, that it will refuse to throw out its roots more than about two years in the same spot. Afterwards it will spread round the sides, whilst the roots in the centre, decay; hence the propriety of a division, and replanting, every other year at farthest.

Hort. Kew. 2, v. 1, 324.

LOBE'LIA BI'COLOR.

TWO-COLOURED LOBELIA.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
LOBELIACEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
C. G. Hope.	6 inches.	July, Sept.	Annual.	in 1795.

No. 351.

Matthias de Lobel, after whom this genus was instituted, was the son of a Flemish lawyer, and was born at Lisle, in 1538. He was a zealous botanist, and ultimately held an appointment, perhaps honorary only, under our English monarch, James I. The application of bicolor, is evident; being partly compounded from bis, twice.

This pretty little annual has been very generally confined to green-house culture, but there is no occasion that the cultivator of hardy flowers should be deprived of the pleasure of possessing it, since it is equally subservient to his management. Its flowers are numerous and pleasing, but from their delicacy and the smallness of the plant, it should be placed near to the hand and the eye, to invite examination; its claims to notice will then be duly appreciated.

Its seeds should be sown early in April, in a pot of fine compost, and placed in a hotbed. When the young plants are about half an inch high, they should be planted, singly, in small pots of rich compost; be gradually exposed to the open air, and at the end of May, they may be either turned out of the pots or retained in them for flowering.

Hort. Kew. 2, v. 1, 361.

COREOPSIS TRIPTERIS.

THREE-LEAVED COREOPSIS.

Class.
SYNGENESIA.

Order.
FRUSTRANEA.

Natural Order.
COMPOSITÆ.

Native of	Height.	Flowers in	Duration.	Introduced
N. America.	6 feet.	Aug. Sept.	Perennial.	in 1737.

No. 352.

Coreopsis is compounded from the Greek CORIS, a bug; and OPSIS, resemblance or appearance, indicative of the shape of the seeds. The trivial name, Tripteris, is deduced from the Greek TRIAS, three; and PTERON, a wing; and is appropriately used in allusion to the leaves of the plant, which occur in threes upon the stems.

The flowers of Coreopsis tripteris are rather small in proportion to its height, but this is amply compensated by other circumstances. Very few herbaceous plants which grow to the same height, possess so great a degree of neatness in all their parts. It has not obtrusive laterals, but is upright and straight, smooth and spruce, quite the trim gentleman, with a touch of the old bachelor, scorning large ornaments.

It demands no peculiar soil, situation, nor treatment. It admits of being divided at the root for increase, and this may be performed either in autumn or spring. If good flowering plants be desired, it should not be parted into very small portions, as it will not attain its full size in the season subsequently to such a division.

Hort. Kew. 2, v. 5, 133.

Chrysanthemum Sinense. ½

Macleaya cordata. ⅛

Leucocarpus alatus. ½

Melittis melissophyllum. ½

CHRYSAN'THEMUM SINEN'SE.

CHINESE CHRYSANTHEMUM

Class.
SYNGENESIA.

Order.
POLYGAMIA SUPERFLUA.

Natural Order.
CORYMBIFERÆ.

Native of China.	Height. 4 feet.	Flowers in Sept. Nov.	Duration. Perennial.	Cultivated in 1790.

No. 353.

From the Greek word, CHRUSOS, gold; and ANTHOS, a flower, the name Chrysanthemum has been compounded, in allusion to the golden hue of some of its species. Sinense, from the name of an ancient people of China.

There are very few plants cultivated in England, which produce so splendid and varied an exhibition of flowers as the varieties of Chrysanthemum Sinense. The season of their flowering is rather later than could be wished by those who possess no conveniency for protecting them; but still, on the approach of frosty weather, this may be effected, even withinside almost every dwelling house, by giving them a place in a light hall, or before a large window. In some seasons a single frosty night occurs as though it were by accident, out of season, a month before winter otherwise makes a general attack on all that we value in the garden. Protection against such an occurrence should be provided if possible. With a little ingenuity this may be produced without any expense worth naming. Those to whom the cost is not matter of consideration, will excuse our suggestions for the benefit of others.

With a wall, having a good aspect, a few boards, placed edgeways against it, to form a recess of eighteen inches deep, and the spare lights of a hot-bed frame, ample protection, in the form of a bookcase, may be provided for a small collection. In the absence of glass lights, strips of wood may be joined together to form a frame; on this form a lattice-work of string, and extend over it large sheets of white paper, such as double-crown printing paper, by uniting the edges of the sheets, and pasting narrow strips of paper over the strings, to the back of it, by which all will be kept firm. The application of a coat of good varnish, by a painter, will render it tolerably transparent and impervious to rain, consequently useful for other gardening purposes. Thus provided, the florist, may completely enclose his pots of Chrysanthemums, during the night, whenever prudence intimates the necessity of such caution. It should, however, be remembered, that all modes of protection are likely to injure their foliage, and render the stems bare and unsightly; therefore as far as is practicable, without incurring danger from severe weather, Chrysanthemums should have full exposure in an airy situation, with ample space between the plants.

We have previously stated, under No. 120, that cuttings, taken in May, produce the most desirable plants, and further experience corroborates this opinion. So raised, the plants are handsomer, better clothed with foliage, and altogether exhibit a freshness and luxuriance wanting in those, which have been raised by autumnal cuttings; or what is still less desirable, by mere divisions of old roots.

Hort. Kew. 2, v. 5, 95.

MACLEA'YA CORDA'TA.

HEART-LEAVED MACLEAYA.

Class.
POLYANDRIA.

Order.
MONOGYNIA.

Natural Order.
PAPAVERACEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
China.	6 feet.	May, June.	Perennial.	in 1795.

No. 354.

This genus has been named by Robert Brown, after Alexander Macleay, Secretary to the Linnean Society. Cordata, from the Latin cor, the heart; a term applied to the shape of its foliage.

The Macleaya cordata will be better known to most of our readers by its Linnean name, Bocconia cordata. From the genus Bocconia it has been separated, on account of its want of agreement in several parts of its inflorescence, as well as in the number of its seeds.

This plant is only seen to advantage when it has remained three or four years undisturbed, in a fresh light loamy soil, and open situation. Under such circumstances, it will produce several stately upright stems, with numerous pannicles of its delicate flowers; which, individually considered, are but humble, yet in the aggregate they become exceedingly interesting. Exposed stamens alone, surrounding the germen, form these airy flowers; thus, destitute of their legitimate apparel, a corolla, they are left to shiver before the breeze; and nature seems to have placed them on a pinnacle, the more to embitter their feelings. Paley's crocus was not half so forlorn.

Hort. Kew. 2, v. 3, 142.

LEUCOCAR'PUS ALA'TUS.

WING-STALKED LEUCOCARPUS.

Class.
DIDYNAMIA.

Order.
ANGIOSPERMIA.

Natural Order.
SCROPHULARINÆ.

Native of	Height.	Flowers in	Duration.	Introduced
S. America.	2 feet.	July, Oct.	Perennial.	in 1830.

No. 355.

The name of this genus is compounded from two Greek words, LUKOS, white; and KARPOS, fruit; the application of which is evident. Alatus, from the Latin, winged, which term is applied to such stalks as have a prominent thin membrane running up their edges.

This plant was published, in the Botanical Magazine, as the Mimulus perfoliatus, after Kunth; but no sooner was its fruit seen than its right to a place in such genus was at once discovered to be untenable.

As no genus had been established to which it could be referred, Mr. D. Don formed a new one under the above name, of which the plant before us at present stands sole occupant.

It has not very much gaiety, its flowers being rather inconspicuous in proportion to its size; but as it bears its white fruit in abundance, with its flowers, it should assist in affording variety to every good collection. Increase is obtained by separation of its offsets; or it may be easily raised from seeds. It is native of the sides of streams, and consequently is encouraged by moisture. It should be protected by the cold frame, in severe weather.

Don's MSS. Sweet's Fl. Gard. 124.

MELIT'TIS MELISSOPHYL'LUM.

MELISSA-LEAVED BASTARD BALM.

Class.
DIDYNAMIA.

Order.
GYMNOSPERMIA.

Natural Order.
LABIATÆ.

Native of	Height.	Flowers in	Duration.	Native of
England.	15 inches.	May, June.	Perennial.	Woods.

No. 356.

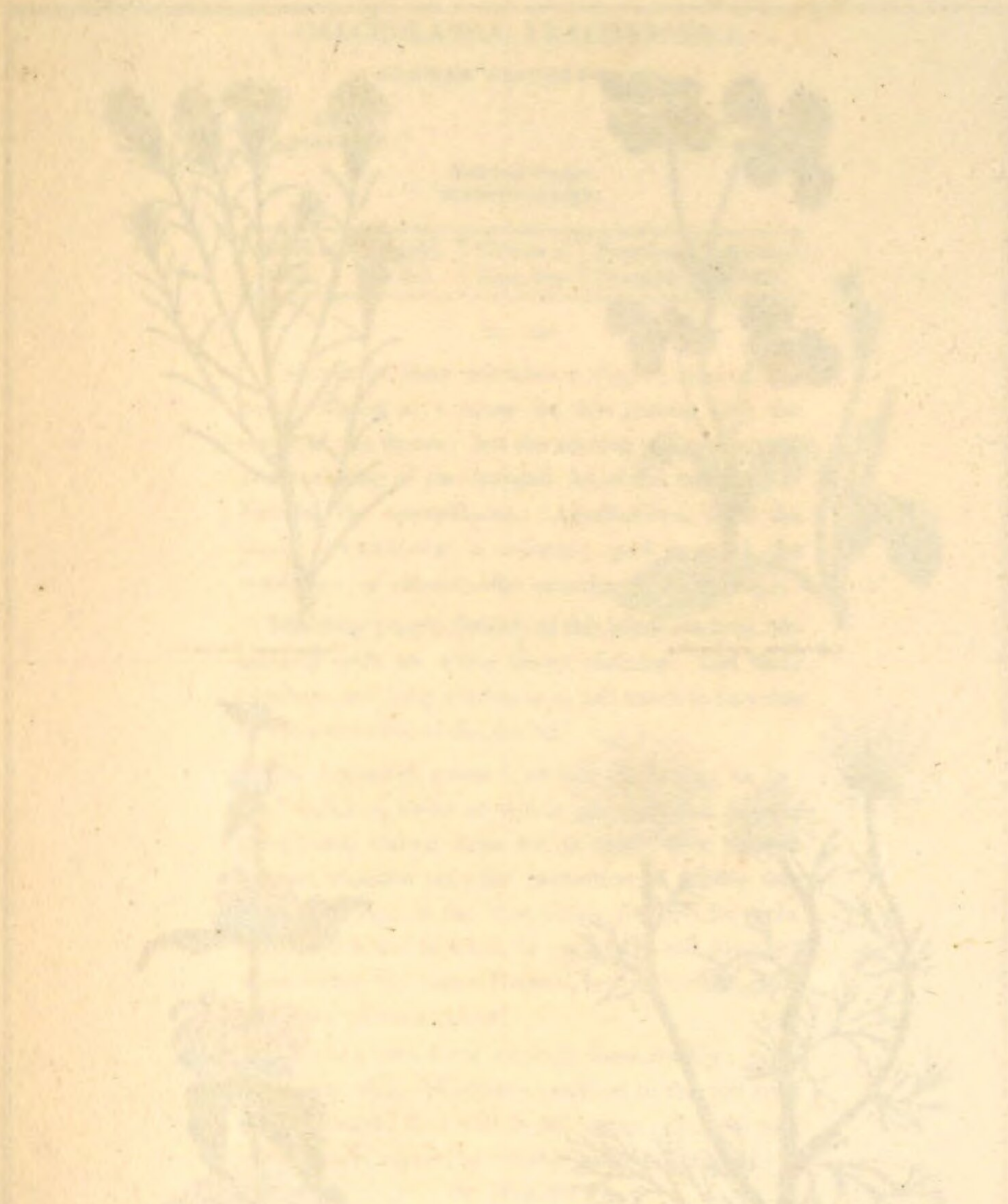
Melittis, from MELI, honey; named on account of bees gathering an abundance of it from the flowers. Melissophyllum, is compounded from the generic title, melissa; and PHULLON, a leaf.

Although this plant occurs pretty frequently in the woods and hedges of some parts of the southern and western counties of England, it has not, we believe, been found in the northern districts, nor even in the midland. The whole plant, in its fresh state, has not a peculiarly agreeable smell, as it approaches that of some species of the anthemis. In its dry state, however, it becomes pleasantly odoriferous, and this quality it is said to retain many years.

A variety of the Melittis melissophyllum which is known as the Melittis grandiflora of Sir J. E. Smith, is more handsome than the plant before us; and as botanists somewhat disagree respecting the identity of the species, we intend, at a future time, giving a figure of it, for the gratification of those who, without possessing specimens, have been led to the consideration of their relationship.

Neither variety requires any peculiar management, or choice of soil and situation.

Hort. Kew. 2, v. 3, 421.



Calceolaria arachnoidea. ⅓

Chrysocoma linosyris. ⅓

Pyrethrum inodorum. ⅓

Phlomis tuberosa. ⅓

CALCEOLA'RIA ARACHNOI'DEA.

COBWEB SLIPPERWORT.

Class.
DIANDRIA.

Order.
MONOGYNIA.

Natural Order.
SCROPHULARINÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Chili.	2 feet.	June, Sep.	Perennial.	in 1827.

No. 357.

Calceolaria, from calceolus, a slipper, or shoe, has been adopted as a name for this genus, from the shape of the flower; but the turning up, and consequent closing of the inflated lip of the corolla, obliterates the resemblance. Arachnoidea, from the Greek ARAKNION, a cobweb; used to mark the woolliness, or cobweb-like covering of its herbage.

The deep purple flowers of this plant contrast admirably with its white fleecy clothing; and their numbers, and long continuance, add much to its value in the estimation of the florist.

This beautiful genus is rapidly increasing in hybrid varieties, some of which are splendid, but the greenhouse claims them for its own. Our present subject requires only the protection of a little tan, litter, or a mat, in the most severe frosts. Its roots, which are found in Chili, in a gravelly soil, are used there under the name Relbun, to dye woollen cloth of a deep crimson colour.

It strikes root from cuttings most readily; or, if the young stems be simply confined to the soil by a hook, or stone, they will do the same. A light soil, with a warm aspect, is suitable to its luxuriance.

CHRYSOCOMA LINOSYRIS.

FLAX-LEAVED GOLDYLOCKS.

Class.
SYNGENESIA.

Order.
POLYGAMIA ÆQUALIS.

Natural Order.
COMPOSITÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Europe.	2 feet.	July, Sept.	Perennial.	in 1596.

No. 358.

From the Greek words, KRUSOS, gold; and KOME, a head of hair, our present generic name has been compounded, in accordance with the appearance of the flower. The word, Linosyris, was the principal name used by Lobel, and some of his successors; the derivation of which may be given in the words of Johnson, who edited a new edition of Gerard's Herbal, in 1633. He says "Forasmuch as this plant is stalked and leaved like common flax, (Linum) and thought, by some, to be osyris, the new writers have called it Linosyris."

The Chrysocoma linosyris ranks in the Flora of Britain as a native inhabitant, but of rare occurrence. We find its only acknowledged habitat to be the rocky cliffs of Berryhead, Devonshire; but as it has not come under the notice of the authors of the Flora Devoniensis, we conclude that it has now no resting place in England, but by sufferance. Germany, and the more southern districts of Europe, are the parts where it is most extensively indigenous.

Its growth is neat and upright; but its terminating yellow blossoms are only showy through their numbers. Its roots may be divided for increase.

Hort. Kew. 2, v. 4, 514.

PYRE'THRUM INODO'RUM.

SCENTLESS FEVERFEW.

Class.
SYNGENESIA.

Order.
POLYGAMIA SUPERFLUA.

Natural Order.
COMPOSITÆ.

Native of Britain.	Height. 2 feet.	Flowers in June, Sep.	Duration. Perennial.	Inhabits dry fields.

No. 359.

Pyrethrum is an ancient Greek name, adopted for a genus that consists of plants which Linneus included under his chrysanthemum, and matricaria, with the addition of some of more recent introduction. The specific name has reference to its want of that powerful scent, so common to its congeners.

Our present subject is often met with in the nurseries as the matricaria grandiflora. Its numerous white flowers, and finely-cut deep green foliage, produce a pleasing effect, when confined to an upright growth, and maintained in a healthy state. Sometimes, towards the latter part of the season, notwithstanding it is as hardy as common chamomile, it becomes unthrifty, and is attacked by insects, which render it unsightly. On the first appearance of disease some of the stems should be cut down to the earth, whilst others may be partially shortened, which will induce young and more healthy herbage.

It may be increased by offsets at almost every period of the year. We think it desirable that it be divided into portions as small as possible, and planted in a rather cool and shady situation. This treatment tends much to its luxuriant appearance.

Hort. Kew. 2, v. 5, 99.

PHLO'MIS TUBERO'SA.

TUBEROUS PHLOMIS.

Class.
DIDYNAMIA.

Order.
GYMNOSPERMIA.

Natural Order.
LABIATÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Siberia.	3 feet.	June, July.	Perennial.	in 1759.

No 360.

The word PHLOMOS was the ancient Greek name of the verbascum, or mullien, and was derived from PHLOGMOS, flame; in allusion to the use made of its leaf-down for the manufacture of lamp wicks. As some of the genus Phlomis are equally woolly, Tournefort adopted the name. It is called tuberosa from the tubers of its roots; which are produced of all sizes beneath that of a small potatoe, and not unlike it in appearance.

The presence of these tubers does not seem to be of primary importance to the existence of the plant, it being furnished with an ample portion of fibrous roots from its crown, whence offsets, and consequently increase, are afforded. Its fibres descend deeply, and mostly perpendicularly, into the earth; and at various distances, within a foot of the surface, a tuber is formed on many of them; not terminally, or principally so, as in the potatoe, but by their enlargement at some distance from either extremity. It is a simple mass of alburnum, resembling, in appearance, the kernel of a cocoa nut, but softer, and of a taste rather bitter, which flavour is not reduced either by boiling or drying.

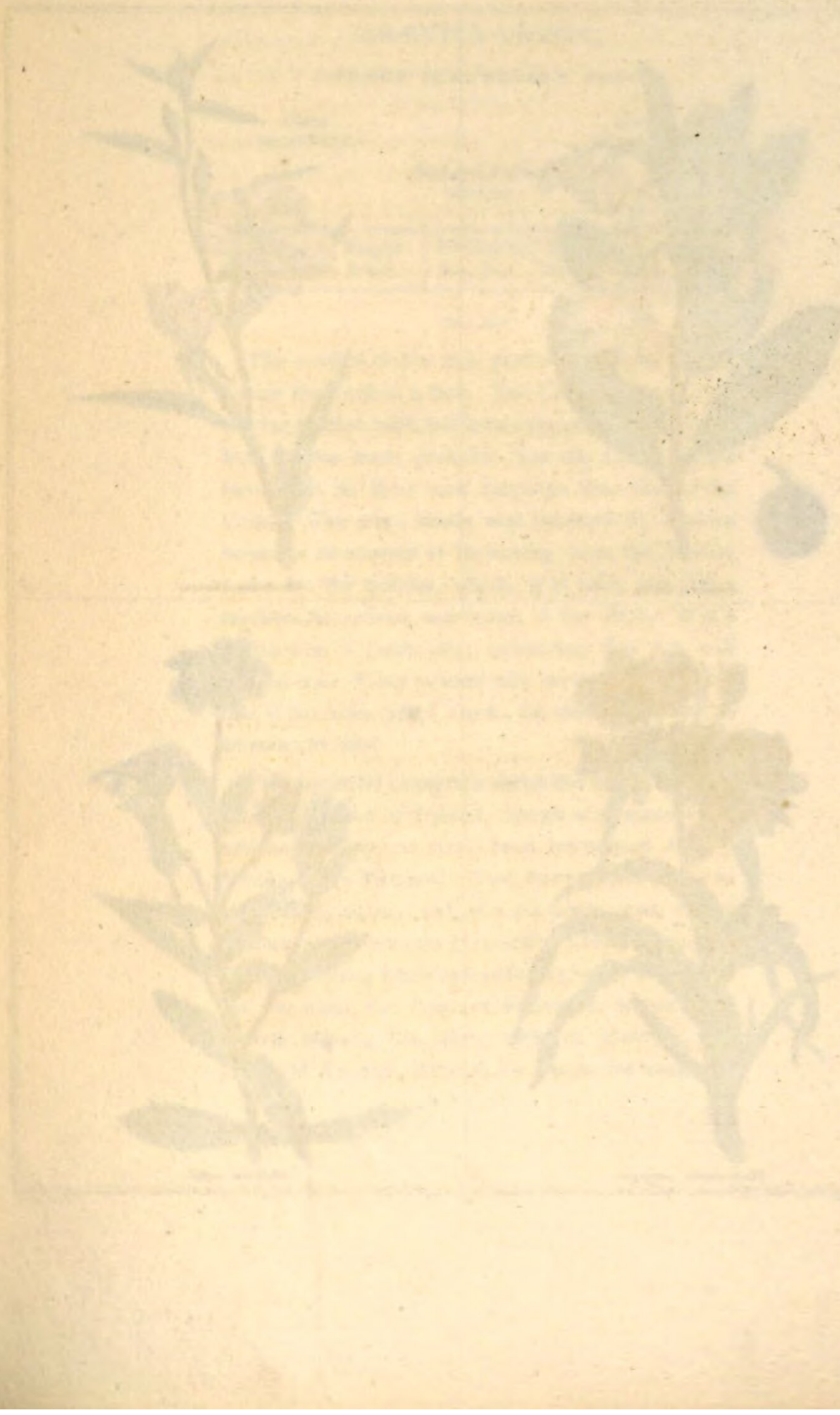
It is probable that a regular supply of moisture, in accordance with the requirements of the plant, would altogether prevent their formation. We know that some species of grass, which are strictly fibrous-rooted, particularly the phleum pratense, produce tubers, in situations where they are exposed to the occasional want of fluids necessary for their luxuriant or healthy increase.

When suffering under such privations, it may be conceived that the stems and roots of a plant become less flexible; and its vessels being constringed by drought, would be incapable, when subsequently supplied with a due portion of fluids, of ready and free dilatation. In this state, the fluids collected by the extremities of the roots may be prevented, by the rigidity of those parts near the surface of the earth, from freely ascending. At this point an accumulation of its juices occurs, and somewhat analogous to the anurism of an artery, a tuber is produced. These tubers, gradually increasing, subsequently become reservoirs, to meet any deficiency of supply that may casually occur. Thus we see infinite wisdom making the very existence of a want the means of its remedy.

A proper distinction must be observed between such tubers as are mere reservoirs of unprepared fluids, and those which are depositories of elaborated juices from the plant, in which the vitality of a future individual of its species exists.

The herbage of the Phlomis tuberosa, having a bold, and rather rough, appearance, renders it most suitable to the foreground of the shrubbery. Our plant grows freely in a red sandy soil, and an exposed situation.

Hort. Kew. 2, v. 3. 408.



Arbutus unedo. 1/6

Œnothera viminea. 1/6

Tradescantia congesta. 1/6

Wedelia aurea. 1/6

E.D. Smith. del.

S. Watts. sculp.

AR'BUTUS UNE'DO.

COMMON STRAWBERRY TREE.

Class.	*Order.*
DECANDRIA.	MONOGYNIA.

Natural Order.
ERICEÆ.

Native of	Height.	Flowers in	Duration.	Native of
Ireland.	8 feet.	Sep. Dec.	Perennial.	Rocky plac.

No. 361.

The word Arbutus was, probably, formed by the Latins from arbos, a tree. The Celtic ar boise, signifying austere bush, has been suggested as its origin, but it seems more probable that the Latins would have built on their own language than that of the Celts. The term unedo was retained by modern botanists on account of its having been the Roman name for the berries, which, it is said, are still a marketable article, and eaten, in the East. It is a contraction of unum edo; intimating that you will eat but one. Pliny sarcastically says it is no wonder that it has been called unedo, for one is sufficient to be eaten at once.

This beautiful evergreen shrub has long been considered a native of Ireland, though with some doubt whether it may not have been introduced by the Monks of St. Finnian. Now, however, it seems to be perfectly naturalized, in a particular spot, where its deep green verdure gives effect to the scene, and the surrounding landscape adds interest to the Arbutus; we mean the Lake of Killarney, where 'The several islands, the white rocks of Mucruss, the groves of Arbutus, the variable woods, the variety of

waterfalls, and the impending cliffs, are separately as delightful and interesting, as their assemblage is infinitely grand and magnificent.'

The just claims of the Arbutus to admiration, have always appeared to us neglected. Its foliage is beautiful, and never deserts us till a chearing vernal sun has spread a new umbrageous mantle over the whole plant. Its flowers are exquisitely delicate, and come forth to take their part in the last scene of the floral drama, to close the season of beauty; and finally, to introduce their offspring to our notice, as faithful attendants, till they themselves appear again. Yes, they leave us their beautiful fruit to deck their evergreen home through all the circling year; till fruit and flowers meet again, and the divine director of all provides another generation to occupy the annual stage.

When we recollect that the Arbutus bears its bright foliage through all seasons; that its flowers of one year, and fruit of the preceding, are present at the same time, it may be asked what more could Elysium offer? It may be said, after Homer,

> "The stern winter smiles on this auspicious clime,
> The fields are florid with unfading prime."

Though this shrub has a rocky situation in Ireland, it grows well in most places, but is far more fruitful on a dry subsoil, and with due shelter from the north. It may be increased by layers, or more advantageously from seeds. These should be sown in pots as soon as ripe, or kept in sand till April, and then sown in pots, in a hotbed. The young plants will require thorough protection from frost till they are at the least two years old.

Hort. Kew. 2, v. 3, 56.

ŒNOTHE'RA VIMI'NEA.

TWIGGY ŒNOTHERA.

Class.
OCTANDRIA.

Order.
MONOGYNIA.

Natural Order.
ONAGRARIÆ.

Native of	Height.	Flowers in	Duration.	Introduced
N. America.	2½ feet.	July, Sep.	Annual.	in 1826.

No. 362.

The derivation of the word Œnothera, has been previously noticed. Viminea, from the Latin, signifying that it is composed of twigs; which is particularly the character of this species of Œnothera, its shoots being long and slender, with very few branches.

This is a handsome free growing annual, which was introduced to this country by the London Horticultural Society, from North America, through the medium of their indefatigable collector, Mr. Douglas; by whose exertions so many other desirable hardy plants have been obtained. Every year adds greatly to our catalogue, and if free access to the unexplored immense wilds of America be continued to European Botanists, this augmentation may proceed through future ages and centuries, of the extended knowledge of which times, it is probably, that no adequate idea can be formed by the present generation.

This annual succeeds very well if sown in the borders, in April. We have sown it in pots, in August, and protected the young plants, during the winter, by which means a few have been saved, which have become very strong and woody, and flowered early in the following season.

Bot. Reg. 1220.

TRADESCAN'TIA CONGES'TA.

CLOSE-FLOWERED SPIDER-WORT.

Class.
HEXANDRIA.

Order.
MONOGYNIA.

Natural Order.
COMMELINEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
N. America.	15 inches.	June, Aug.	Perennial.	in 1825.

No 363.

The name, Tradescantia, is very properly applied to this handsome genus of plants, in commemoration of the two individuals, father and son, named John Tradescant. Congesta, from the Latin, signifying heaped together, in allusion to the flowers.

The elder of the Tradescants was, probably, the first individual who collected any considerable quantity of subjects in natural history, worthy of being called a Museum. It was known by the title Tradescant's Ark; and was not only visited by royalty and the principal nobility of his day, but also much enriched by their liberality. The younger Tradescant bequeathed it to Mr. Elias Ashmole, who subsequently presented it to the University of Oxford. Thus Tradescant's Ark was the foundation of the Ashmolean Museum in that university.

The Tradescantia congesta is nearly allied to the more common species, the Tradescantia Virginica, both of which are desirable plants in the mingled flower garden. Though their flowers are but the gaiety of a day, still every day has its supply, and the plant is, consequently, always showy. It may be divided for increase, and needs no peculiar soil.

D. Don MSS.

WEDE'LIA AU'REA.

GOLDEN-FLOWERED WEDELIA.

Class.
SYNGENESIA.

Order.
POLYGAMIA NECESSARIA.

Natural Order.
COMPOSITÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Mexico.	2 feet.	July, Sep.	Perennial.	in 1828

No. 364.

Wedelia is a name which was adopted in honour of a German botanist of the name of Wedel. Aurea, from the Latin, gold-coloured.

The Wedelia aurea was first introduced to the Bury Hill collection, in this country; seeds of it having been transmitted thence from Mexico, by Cervantes. It is a tuberous-rooted herbaceous plant, but unlike the Phlomis tuberosa, lately noticed, its vitality and increase is rendered dependent on its tubers. In its division and propagation these form a primary part of its roots; whilst the fibrous appendages of the Phlomis will maintain the plant independently of its tubers.

It grows freely in a light soil, and warm situation, and when increase is desired, its tubers may be divided, which is most suitably performed in spring. Or, cuttings of the young stems will strike root under a hand-glass. In the open ground it rarely ripens seeds freely; but if these be desired, it should be flowered in the green-house, which will induce fruitfulness. It will always be adviseable to protect a plant of it in winter, lest those in full exposure should be lost by very severe weather.

D. Don MSS.

Œnothera roseo-alba.

Lupinus Mexicanus.

Hyacinthus orientalis.

Narcissus bicolor.

ŒNOTHERA ROSEO-ALBA.

RED AND WHITE ŒNOTHERA.

Class.
OCTANDRIA.

Order.
MONOGYNIA.

Natural Order.
ONAGRARIÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Nepal.	15 inches.	July, Sept.	Annual.	in 1827.

No. 365.

The word Œnothera is explained under No. 163. Roseo-alba refers to the colour of the flower.

The great number of species contained in this genus, nearly all of which are perfectly hardy; and the peculiar beauty of the greatest portion of them, will afford ample apology for the appearance of another Œnothera so early. The variable combination of rose-colour and white in this species is much admired. We represent its most usual appearance, but it is oftentimes produced with an additional stain of red upon each petal, in the manner of Œnothera Lindleyana. True hybrids between these two species have been produced, which have been observed to be peculiarly attractive.

In cultivation it will be found rather more fastidious than some others, as it seems neither to bear continued drought or a wet season, without betraying some symptoms of injury. It succeeds best when sown in the open ground, in April; and in the mixed borders, not more than one or two plants should be left in each place. They may be set about eighteen inches apart, when grown on separate beds; where they will afford a very gay effect.

LUPI'NUS MEXICA'NUS.

MEXICAN LUPINE.

Class.
MONODELPHIA.

Order.
DECANDRIA.

Natural Order.
LEGUMINOSÆ.

Native of Mexico.	Height. 2 feet.	Flowers in July, Sep.	Duration. Perennial.	Introduced in 1819.

No. 366.

The derivation of Lupinus has been recently noticed. This plant was published, several years ago, in the Botanical Register, having been introduced from Mexico to the Botanic Garden of Madrid, whence seeds of it were sent to England. Its habit being at first unknown it was soon lost, but in these days of research, in every quarter of the globe, such losses in general meet speedy reparation. To the personal exertions, and also the pecuniary liberality, of men of science and fortune, these advantages are principally owing. Many botanists, however, in foreign countries are now wholly or partly employed, by English nurserymen, to send new and rare plants to England; therefore, every customer of the nurseryman is an indirect subscriber to the great object of exploring remote corners of the globe.

A Lupine which is often considered the Mexicanus, is the tomentosus. A prominent difference exists in their pubescence; the Lupinus Mexicanus is clothed with long soft hairs, whilst those of the tomentosus are short and close, as its name implies.

Forward the young plants in a hotbed, or they may flower too late to ripen their seed.

Bot. Reg. 457.

HYACIN'THUS ORIENTA'LIS.

ORIENTAL HYACINTH.

Waterloo variety.

Class.
HEXANDRIA.

Order.
MONOGYNIA.

Natural Order.
ASPHODELEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Levant.	9 inches.	Mar. Apr.	Perennial.	in 1759.

No. 367.

The name of this genus originated with the fabulists of antiquity. It was pretended that Hyacinth was the son of a Spartan King, and the favourite of Apollo. Zephyrus, being envious of the attachment of Apollo and Hyacinth, so turned the direction of a quoit which Apollo had pitched, whilst at play, that it struck the head of Hyacinth, and slew him. The fable concludes, by making Apollo transform the body of his favourite into the flower which bears his name. Orientalis, oriental, it being a native of the East.

The Oriental Hyacinth degenerates in the mixed parterre, under common culture; therefore when compared with the splendid flowers of such as have been newly imported from the careful Dutch florists, it fails to please its possessor. It is the pampered nursling of Holland, consequently should not be expected to display its greatest beauty under negligent treatment in England.

The flower of the Hyacinth, produced in the spring, is principally dependant for its strength on the management of the preceding season; therefore in the first year that Dutch bulbs blossom in England, the

beauty and superior size of their flowers are but in a small degree attributable to our care. It is the perfect preservation, or rather reproduction, of these bulbs, year after year, which exhibits the attention and skill of the florist.

To effect this efficiently, for it is not true that the Hyacinth cannot be successfully continued and increased in England, it should be planted late in October, in beds properly prepared to meet its wants. These may be shaped agreeably to the fancy of the florist. One spade's depth should be thrown out of the bed; in the bottom a good portion of manure should be dug in, and blended with the soil. From four to six inches depth of rich compost should then be put in: This may be made of two parts fresh loam, two parts sand; one part well decayed cow or stable manure, and one part leaf mould. These will form an excellent compost, but the precise quantities of the materials have no peculiar charm. On this a thin layer, about half an inch thick, of sand and leaf mould mixed, should be spread: the bulbs should then be placed thereon at from nine to twelve inches apart, and be carefully covered over, about an inch above their tops, with a light sandy earth. Then spread over the whole, a layer, two or three inches thick, of rotten tan, or part of an old hot-bed which has been spread to dry and well broken. This will prevent rapid evaporation or hardening of the surface soil. The bed should be protected against severe frost, particularly when the leaves appear; at other times give it free exposure till the flowers are in danger of injury; when an awning should be provided to preserve them from injury by unpropitious weather.

Hort. Kew. 2, v. 2, 282.

NARCIS'SUS BI'COLOR.

TWO-COLOURED NARCISSUS.

Class.
HEXANDRIA.

Order.
MONOGYNIA.

Natural Order.
AMARYLLIDEÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Spain.	15 inches.	May.	Perennial.	in 1629.

No. 368

The Greek word, NARKE, signifying stupor, is the base on which the name of our present genus was built. The narcotic perfume of the flowers occasioned its application. The term bicolor, two-coloured, is at once seen as applicable to this species. This is Mr. Haworth's Ajax bicolor.

Mr. Haworth, the nicely-discriminating author of Synopsis Plantarum Succulentarum, has published a Monograph of Narcissineæ. He has divided this cumbrous group of plants into several genera, and very advantageously systemized the whole. Though we retain the old nomenclature, we shall always mention Mr. Haworth's, that future readers of the Botanic Garden may not be inconvenienced when his new arrangement becomes duly appreciated and generally adopted.

The fine yellow tubular crown and white perianthium which are united in this flower, produce a handsome and bold effect. It is the Narcissus tubiflorus of Salisbury.

This, like other bulbous plants, should not be disturbed whilst in a state of growth. When the leaves are decayed the bulbs may be removed.

Salisbury's Prodromus.

Lathyrus odoratus. ½

Galinsogea trilobata. ½

Dracocephalum Moldavicum ½

Melittis melissophyllum. ½

LA'THYRUS ODORA'TUS.

SWEET PEA.

Class.
DIADELPHIA.

Order.
DECANDRIA.

Natural Order.
LEGUMINOSÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Sicily.	6 feet.	June, Aug.	Annual.	in 1700.

No. 369.

The word Lathyrus is of very ancient origin, and used by the Greeks, as indicative of an exciting or stimulating quality. Odoratus, from the Latin, sweet.

We have much pleasure in introducing to our friends so pretty a group of their favourite acquaintances,—varieties of the ever-admired Sweet Pea. This is one amongst other annual beauties, which never tires by its presence. It is not only always welcome, but always sought for; and its attractions can be seldom satisfactorily dispensed with. There may be persons whose friendship is ephemeral, and their admiration a breath; but very few indeed who do not continue their love of whatever deserves it. though they ardently seek to extend their pleasures by increasing their knowledge of new objects.

The purple variety is believed to be native of Sicily; the pink and white, or painted Lady, of Ceylon. The combination of their colours is variable, and some are called striped, but they have more the appearance of shadings in chalk, which rather diminishes than increases their beauty. Their formation, as well as that of other papilionaceous flowers, should not be neglected. The family is called papilio-

naceous from papilio, the systematic name of the butterfly, which their blossoms somewhat resemble.

Those who have not examined this flower should do so. The parts of fructification, which require protection, are securely enclosed in the central or lower petal, called the keel, from its resemblance to the keel of a boat. Over this is placed a little roof, as a shelter from rain, composed of two other petals, placed in a sloping direction, which are called the wings. Human wisdom would have stopped here, as having effected sufficient for the purpose; for man's best intentions seldom carry his exertions beyond the point he believes to be requisite; and even in that degree of perfection he is usually deficient. But not so the wisdom and unbounded beneficence of the Divine Being. His care exceeds our conceptions. Even in the flower before us the very wind is debarred from ruffling its beauty, or disturbing its operations. Over the wings, as previously noticed, is erected a single broad petal, called the standard, or banner. The whole flower is raised by a long peduncle or flower-stalk, to which it is attached by a short, soft, and flexible, pedicle or secondary flower-stalk. Thus elevated, the Sweet Pea blossom becomes a vane. The rude blast that would injure it, blowing on its standard, turns it from the wind, and preserves it from harm.

We now, concisely, state our culture and produce. Seeds were sown in October last, in a rich light soil, and warm situation. In June the plants were nine feet high, clothed in a mingled blaze of blossom. The produce, within a space of little more than five square yards, is **7825 Pods.**

Hort. Kew. 2, v. 4, 307.

GALINSO'GEA TRILOBA'TA.

THREE-LOBED GALINSOGEA.

Class.
SYNGENESIA.

Order.
POLYGAMIA SUPERFLUA.

Natural Order.
COMPOSITÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Peru.	2 feet.	Aug. Sept.	Annual.	in 1797.

No. 370.

The generic name, Galinsogea, was adopted in honour of M. M. Galinsoga, Physician to the Queen of Spain, and a botanist of Madrid, to whom the superintendence of the Botanical Garden there was confided. Trilobata will either apply to its three-lobed petals, or lower leaves.

This annual, as shown by our date, registered above, is not of very recent introduction. It has been, however, but very little known, principally, it may be imagined, from the powerful opponent it would find in the French Marigold. The Galinsogea trilobata, and French Marigold, have great similitude of character, and it must, in honesty, be confessed, that our present subject will stand but second best in comparison with its rival. Those of our readers who have space, will, nevertheless, be gratified in possessing it, as it requires but little care, and continues long in flower.

The culture of the Galinsogea trilobata, is the same as that adopted for the usual sorts of hardy annuals; it being only necessary to sow it in the open borders, in the beginning of April. One or two plants are sufficient for each place.

Hort. Kew. 2, v. 5, 122.

DRACOCEPH'ALUM MOLDA'VICUM.

MOLDAVIAN DRAGON'S HEAD.

Class.
DIDYNAMIA.

Order.
GYMNOSPERMIA.

Natural Order.
LABIATÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
Moldavia.	1½ feet.	July, Aug.	Annual.	in 1596.

No. 371.

The word Dracocephalum, is deduced from the Greek DRACON, a dragon; and CEPHALE, a head; and alludes to the fancied appearance of the flower. The fabled accounts of Dragons we have noticed under No. 57; to which we may add, that the word DRACON seems to have been adapted to these tales, having been derived from DERCO, a term which, with its derivatives, is expressive of the fire-flashing eyes of the imaginary monster, to which it has given a name. Moldavicum, from Moldavia, the country of which it is indigenous. It is a Turkish province, adjoining Poland.

This is a pretty annual, and deserves to be better known; as well too, for its perfume, as its neat spikes of flowers. The whole herb yields a lemon-like scent, somewhat approaching the delightful perfume of the Aloysia citriodora, more commonly known as the lemon-scented Verbena. The Dracocephalum Moldavicum has a white variety, the seed of which is often mixed with the blue.

We have usually raised it in the hotbed, in April, and transplanted it into the mingled flower beds; not more than three plants in a place.

Hort. Kew. 2, v. 3, 420.

MELITTIS MELISSOPHYLLUM.

MELISSA-LEAVED BASTARD-BALM.

Large-flowered.

Class.
DIDYNAMIA.

Order.
GYMNOSPERMIA.

Natural Order.
LABIATÆ.

Native of	Height.	Flowers in	Duration.	Inhabits
England.	1½ feet.	June.	Perennial.	Woods.

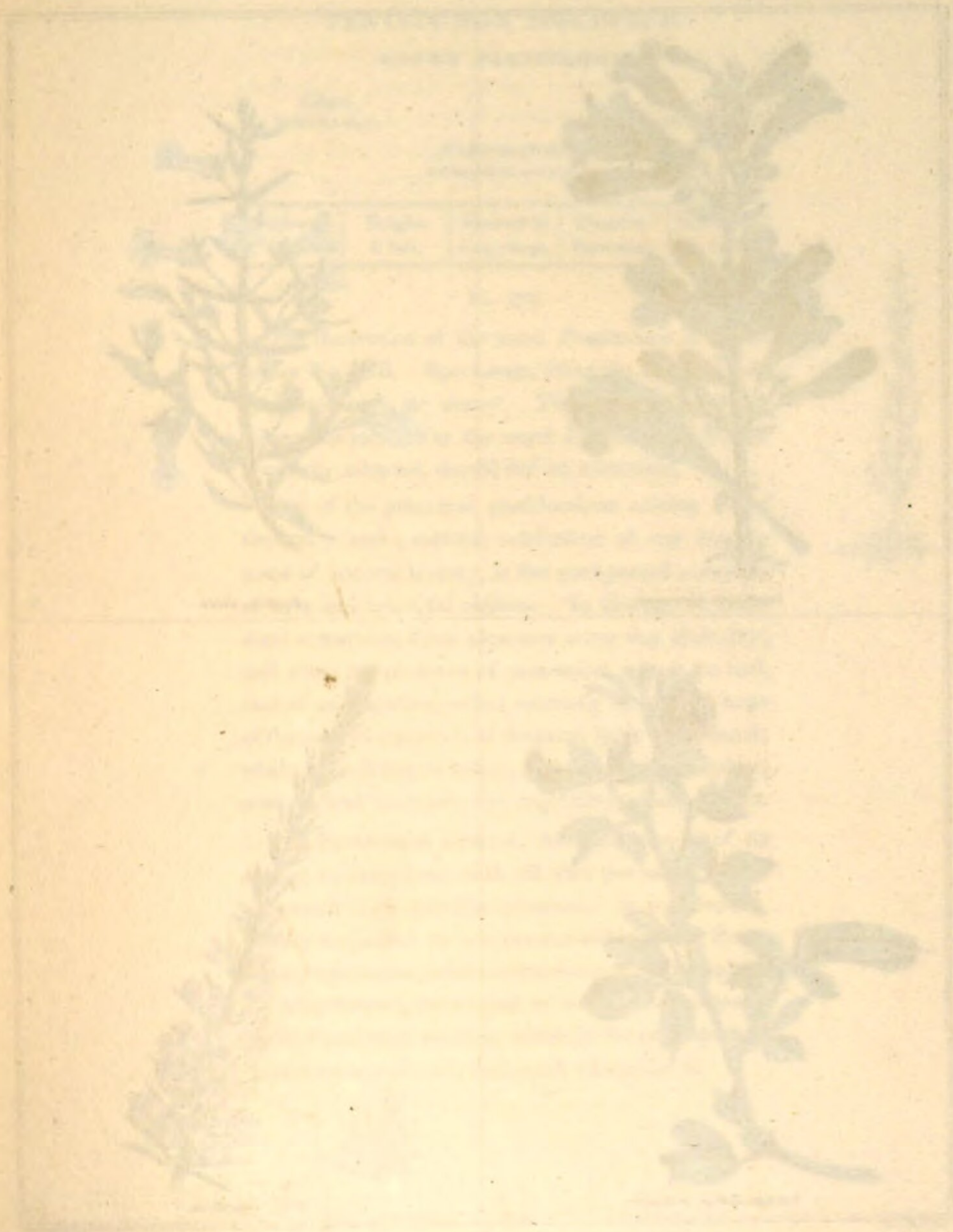
No. 372.

The Melittis melissophyllum we have given under No. 356, and there promised a figure of another variety of the same plant. The present subject is the one alluded to; which has, by several authors, been considered a distinct species, and called Melittis grandiflora. There appears to be no tenable ground for this distinction. The breadth of the leaves, and the divisions of the calyx, which form the assumed reasons of separation into two species, are, most certainly, variable marks in this plant, on which the botanist cannot rely.

Johnson, in his edition of Gerard, has a tolerably good figure of each variety, which he has copied from Clusius and Lobel, as he says, to show the several expressions of the plant. His observations are not inapplicable to our present purpose, In reference to the Melittis melissophyllum, which he calls Melissa Fuchsii, he says "This varies with the leaues sometimes broader and otherwhiles narrower: also the floures are commonly purple, yet sometimes white, and otherwhiles of divers colours."

This variety is by far the most showy of the two, and requires no peculiar management.

Hort. Kew. 2, v. 3, 422.



Pentstemon speciosum. 1/6

Gratiola aurea. 1/6

Tetragonolobus purpureus. 1/2

Erica multiflora. 1/2

PENTSTE'MON SPECIO'SUM.

SHOWY PENTSTEMON.

Class.
DIDYNAMIA.

Order.
ANGIOSPERMIA.

Natural Order.
SCROPHULARINÆ.

Native of	Height.	Flowers in	Duration.	Introduced
N. America	3 feet.	July, Sept.	Perennial.	in 1827.

No. 373.

The derivation of the word Pentstemon is given under No. 316. Speciosum, from the Latin, signifying specious, or showy. The use of incorrectly formed adjectives to the word Pentstemon, though generally adopted, should not be continued.

One of the principal gratifications arising out of the study and practical cultivation of any department of natural history, is the unexpected accession of new and beautiful objects. In this age of botanical enterprise, these pleasures occur day after day; and when the pleasure of possession cannot be had, that of anticipation,—that eternally springing hope of the soul, yields much of the same balm to the mind; whilst stimulating to action, it invigorates the animal powers, and increases the capability of enjoyment.

The Pentstemon ovatum, from the novelty of its colour, as compared with all that preceded it, was welcomed with peculiar pleasure. It is, however, greatly surpassed by our present subject, the Pentstemon speciosum, whose attractive panicles of splendid blue flowers, far exceed in beauty the blossoms of the Penstemon ovatum, which is the only species, at present introduced, that much resembles it.

It is, as we have just observed, this continual surpassing of the surpassing, that produces so regular a flow of gratifications; and who will say, where pleasures are built on sources so pure, so closely connected with original innocence, and so little mingled with the pollutions of the world, that they are not the parents of some true happiness.

"Yes, — you, delightful handy-works of Him
Who arch'd the heavens, and spann'd this solid earth,
Before whose glory day's proud light is dim,
And art's achievements, if not food for mirth,
Display at best its barrenness and dearth,—
You, too, instruct us, with "line on line,
Precept on precept," show us by your birth,
Your bud, your blossoming, and your decline,
Time's never-ceasing flight, and tell us truths divine."

BERNARD BARTON.

The Pentstemon speciosum does not admit of separation at the root, to promote its increase, with that facility as may be practised with some others of the Pentstemons. Its free habit of flowering is unfavourable to an increase of offsets; therefore, sacrifice must be made of the one or the other. If it be desired that immediate increase of the plant be obtained, the flowering stems should be cut off nearly at the bottom, when they are two or three inches high. The top of the soil, round the plant, should then be loosened, and a little fresh light compost added, to encourage the young side shoots to strike root; and occasional waterings should afterwards be given. It may be raised from seeds, sown in the spring, but the plants will not generally flower till the following summer.

Bot. Reg. 1270.

GRATI'OLA AU'REA.

GOLDEN HEDGE HYSSOP.

Class.
DIANDRIA.

Order.
MONOGYNIA.

Natural Order.
SCROPHULARINÆ.

Native of N. America.	Height. 4 inches.	Flowers in June.	Duration Perennial.	Introduced in 1820.

No. 374.

The name of this genus not occurring in the ancient Greek or Latin writers, it is believed to have originated with the herbalists of the fifteenth or sixteenth century. The name itself, signifying grace or favour, supports the supposition, as it indicates medicinal virtues, which were then principally studied. Indeed, some of the old simplers used the appellation Gratia Dei, signifying Grace of God, for their Gratiola, which is the Gratiola officinalis of modern authors. Aurea, from the Latin, signifying golden or yellow.

As our little Gratiola aurea is a native of America, and of late introduction, it is most probable that its medicinal virtues were never submitted to the test of a Galen or a Culpepper; therefore, although its generic connexion be of so high a medical character, it has reaped no laurels for itself in that department of science.

It is a neat but small plant, and is better fitted for pot culture, or the embellishment of the lapidium, than for growth in the mingled flower border. It may be divided for increase, and should be planted in a mixture of peat and loam, in a cool situation.

Bot. Cab. 1399.

TETRAGONOLOBUS PURPUREUS.

DEEP RED TETRAGONOLOBUS.

Class.
DIADELPHIA.

Order.
DECANDRIA.

Natural Order.
LEGUMINOSÆ.

Native of	Height.	Flowers in	Duration.	Introduced
S. Europe.	1 foot.	July, Aug.	Annual.	in 1596.

No. 375.

The word, Tetragonolobus, has been compounded from the Greek, to designate the peculiar four-angled character of the seed pod. Thus, TETRA, four; GONIA, angle; LOBOS, pod. Purpurea, in the Latin, is not quite synonymous with purple; but signifies dark red, or purple.

This richly-coloured annual was long known as the Lotus tetragonolobus of our gardens, but it has been divided from the genus Lotus by modern botanists, merely on account of its pods being square, whilst those plants possessing the same characters, but with round pods, are retained as the true Lotus.

It has been noticed in the works of most of the old English and continental botanists, who have given it descriptive names, just as fancy dictated; though, in most instances, they had regard to the four-square formation of the pod; or, as Johnson in his Gerard says, the four thin welts, or skins, which make them seem four-square.

It should be sown in the spring with other hardy annuals. In small circles, from a foot to eighteen inches diameter, and supported with a few short sticks, it is seen to greatest advantage.

Hort. Kew. 2, v. 4, 392.

ERI'CA MULTIFLO'RA.

MANY-FLOWERED HEATH.

Class.
OCTANDRIA.

Order.
MONOGYNIA.

Natural Order.
ERICEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
France.	18 inches.	June, Oct.	Perennial.	in 1731.

No. 376.

The word Erica is derived from the Greek EREICO, to break. It has been applied to this genus either from the fragility of the branches of some species of it; or, from its medicinal properties, which were supposed to be efficacious in reducing or breaking the calculus. Multiflora, from the Latin multus, many; and flos, a flower.

The Erica multiflora is a native of the milder parts of Europe; and on its introduction to this country, was kept as a green-house species. It bears our climate very well; though in some situations, where no peat has been mixed with the soil in which it is planted, it will assume a sickly appearance, and if not removed will, ultimately, be lost.

The hardy Heaths are generally natives of exposed situations, on hills, where the temperature is low, in comparison with the vallies. When planted in the warmth of the low-lands, the same exposure is disadvantageous. They succeed best in cool places, with partial shelter from the sun. Their trailing branches should be laid in light vegetable mould, in which they will strike root, and subsequently admit of separation.

Hort. Kew. 2, v. 2, 367.

Ribes Sanguineum. ½

Circæa alpina. ½

Potentilla pedata. ½

Pyrethrum roseum. ½

E. D. Smith del.

S. Watts sculp.

RI'BES SANGUI'NEUM.

CRIMSOM-FLOWERED CURRANT.

Class.
PENTANDRIA.

Order.
MONOGYNIA.

Natural Order.
GROSSULACEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
N. America.	8 feet.	May.	Perennial.	in 1826.

No. 377.

Ribas, whence has been derived our Ribes, is a word of Arabian origin, which was used by the Eastern Physicians as the name of a medicinal plant. Its origin has occasioned its adjective being formed in the neuter. Sanguineum, from the Latin sanguis, blood; from the colour of its flowers.

The great beauty, and the hardy character, of several species of Currant, which have lately been introduced to this country from America, render them indispensible ornaments of every garden and shrubbery. The Ribes aureum, we figured under No. 189. The Ribes sanguineum, now given, is, in respect to its flowers, a distinct and beautiful species; and a third, the Ribes speciosum, whose flowers somewhat resemble those of the Fuschia, whence it has been called the Fuschia-flowered Currant, we intend laying before our readers at no very distant period.

Having, as we all have had, from childhood, so intimate an intercourse with the red, the white, and black currants, appendages to every cottage, and natives of our own country; and seeing these strangers to be so very similar in their general habit and appearance, fancy would almost persuade us they

are mere slippings of our old acquaintances, who have returned from a transatlantic residence, to exhibit their smart trappings of American fabric; just as the gay daughter of the husbandman returns to the plain but comfortable domicil of her childhood, after a seven years' residence amid the gaieties of the metropolis.

In an account of various species of Ribes, indigenous to America, sent to the London Horticultural Society, by David Douglas, it is observed that few shrubs are more ornamental than Ribes sanguineum; but its fruit, in a natural state, is of so very musky and unpleasant a flavour, that even the birds do not use it. It forms an erect branching bush, six feet in height, with red smooth branches, leaves very like those of the black currant, but rather smaller, and showy pink or crimson flowers, succeeded by black berries. Its native habitat is in rocky situations, or on the shingly shores of streams, in partially shaded places, never extending beyond the influence of the sea-breeze, and from 38° to 40°, and as high as 52° N. lat. on the coast of North-west America. It was discovered by Archibald Menzies, Esq., so long ago as 1787, during his first voyage round the world, but only introduced, by Mr. Douglas, to the Horticultural Society, in 1826; and the plants, raised from seed, blossomed for the first time in April, 1828.

In June last we took cuttings of the young spring shoots of Ribes sanguineum, and planted them under glass, on a north border; they struck root readily, and are fine growing plants; whilst the cuttings, taken in February, of last year's wood, are weakly, and without young growth.

Bot. Reg. 1349.

CIRCÆ'A ALPI'NA.

ALPINE ENCHANTER'S NIGHTSHADE.

Class.
DIANDRIA.

Order.
MONOGYNIA.

Natural Order.
CIRCÆACEÆ.

Native of	Height.	Flowers in	Duration.	Inhabits
Britain.	5 inches	June, Aug.	Perennial.	Mountains.

No. 378.

The name of this plant was adopted after that of the enchantress Circe; a mythological personage, whom Homer, in his Odyssey, has made to play malicious pranks with the men of Ulysses. She is there represented dispensing her favours to them,—

"Milk newly press'd, the sacred flour of wheat,
And honey fresh, and Pramnian wines the treat."

But her luxuries are envenomed, and she afterwards changes her guests into swine. Our readers will deduce their own moral.

This is one of the minor beauties of the mountains, but is worthy of attentive examination. Properly disposed of, on borders or mounts, chiefly covered with stones, of almost any description, these small subjects excite a pleasing interest. This is always lost where they are planted indiscriminately with large subjects, which prevent the attention resting on their diminutive forms.

The Circæa alpina increases fast by its roots, which may be divided at almost any season. If the soil be rich and light, in which they are to be planted, they should be potted, and the pot sunk, to prevent their spreading inconveniently.

Hort. Kew. 2, v. 1, 26.

POTENTIL'LA PEDA'TA.

FOOT-LEAFED CINQUEFOIL.

Class.
ICOSANDRIA.

Order.
POLYGYNIA.

Natural Order.
ROSACEÆ.

Native of	Height.	Flowers in	Duration.	Introduced
Europe.	18 inches.	June, Sept.	Perennial.	in 1819.

No. 379.

Potentilla, signifying little power, alludes to its medicinal properties. Pedata, is given to this species, on account of the bird's-foot shape of its foliage.

The brilliant colour of the flowers of Potentilla pedata, and the length of time which they continue to be produced in succession, are qualities which recommend it for cultivation. It is not sufficiently strong in the stem to support itself erectly; consequently, it is very desirable that it be properly tied up before it exceeds six inches in height. We have oftentimes observed that plants, which need support, are neglected till their appearance will no longer admit it. This error should, as far as is possible, be corrected; for having been once suffered to straggle over the bed, they very rarely can be rendered neat and sightly; whilst early training, as well in the vegetable as in the animal kingdom, produces correct habits, which will be advantageous to the possessor, and pleasing to others.

This species should be propagated by seed. Seedlings flower in the second year, better than portions of old plants. In a peat border, it died with us in two years; but in loam it continues quite healthy.

PYRE'THRUM RO'SEUM.

ROSY FEVERFEW.

Class.
SYNGENESIA.

Order.
SUPERFLUA.

Natural Order.
COMPOSITÆ.

Native of	Height	Flowers in	Duration.	Introduced
Caucasus.	1 foot.	July.	Perennial.	in 1826.

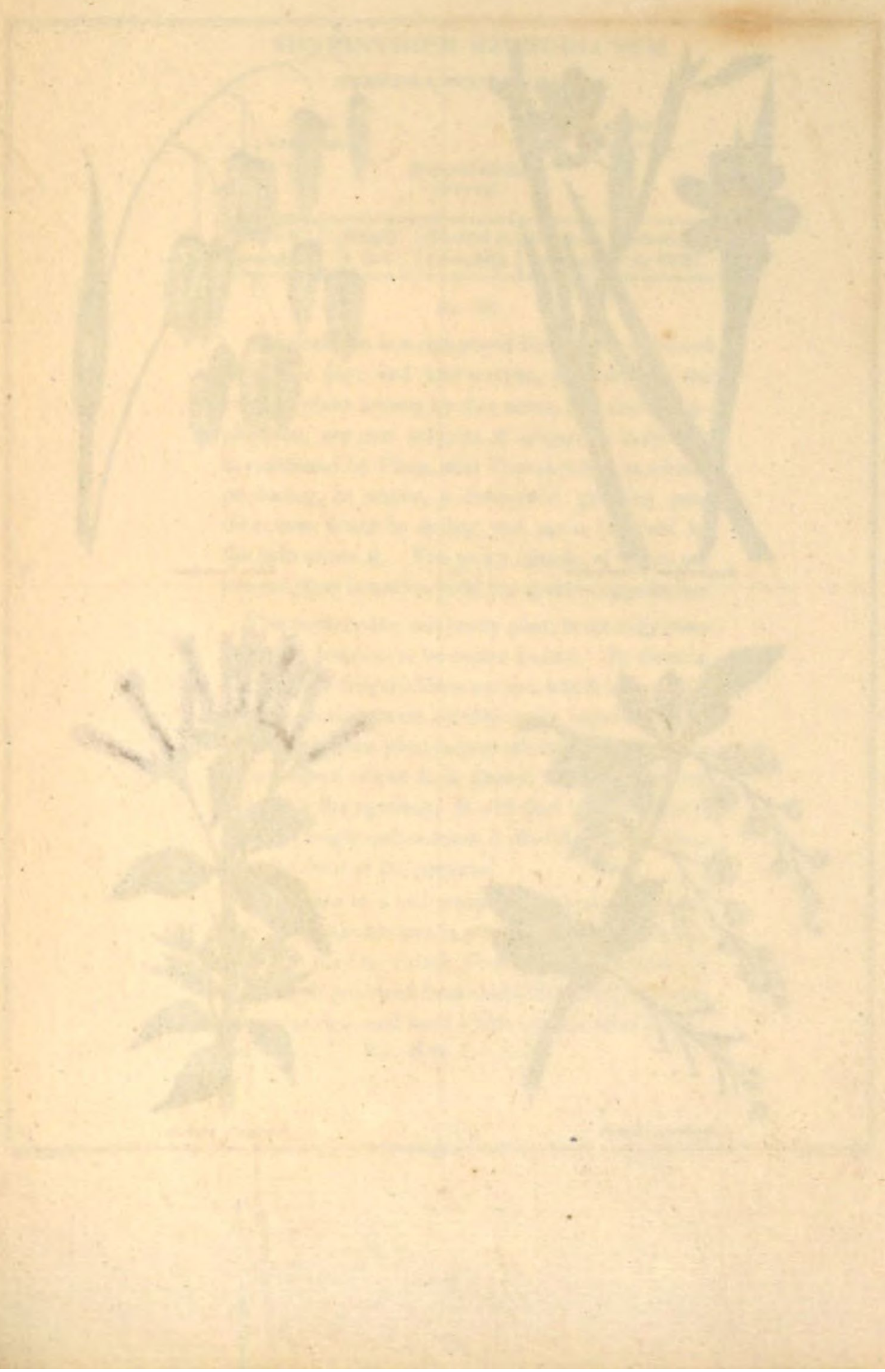
No. 380.

The term, Pyrethrum, is of Greek origin, and was founded on the word PYR, fire. It is supposed to have been first used indicatively of the pungency of the plant to which it was applied, a species, probably, of anthemis.

The Pyrethrum roseum is completely hardy, and when it has continued in one situation two or three years, so as to become well established, it forms a desirable variety in the herbaceous collection. It should not, however, be dissembled that, on account of its petals, in reference to its disk, being disproportionately short, it is far less attractive than most of our old favourites. It belongs to a natural order of considerable splendour, and reminds us of many gay plants, of the same class, which induces a comparison to the disadvantage of our present subject.

In culture it requires no great care, either as respects soil, situation, or aspect; though a moist situation appears to be less congenial to its nature than a dry one. If increase of the plant be required, it may be divided in the seasons when such operations are usually performed; otherwise it is better to let it continue undisturbed.

Bot. Reg. 1026.



Sisyrinchium Bermudianum. ⅓

Briza maxima. ⅓

Berberis vulgaris. ½

Bouvardia triphilla. ½

SISYRIN'CHIUM BERMUDIA'NUM.

BERMUDA SISYRINCHIUM.

Class.
TRIANDRIA.

Order.
MONOGYNIA.

Natural Order.
IRIDEÆ.

Native of	Height	Flowers in	Duration.	Introduced
Bermudas.	1 foot.	June, July.	Perennial.	in 1732.

No. 381.

Sisyrinchium is a compound Greek word, formed of SYS, a pig; and RHYGCHOS, a snout; but the original plant known by this name, and also its application, are now subjects of conjecture only. It is mentioned by Pliny, after Theophrastus, as a bulb, producing, in winter, a downward growing protuberance, which in spring was again imbibed by the bulb above it. The rocky islands, of which our present plant is native, yield it a specific appellation.

This unobtrusive and pretty plant is not very common, but deserves to be better known. Its flowers, like those of Sisyrinchium anceps, which is a smaller species, decline rather quickly under exposure to the sun, therefore the plant is most advantageously grown in an aspect where it is shaded after nine or ten o'clock in the morning. It will then become showy. From its height and neatness it should occupy a place near the front of the parterre.

It delights in a soil composed of loam and peat. This particular mixture is, nevertheless, not indispensible. It may be raised from seeds, or divided at the root. If produced from seeds, they should be sown as soon as ripe, and have a little shelter from frost.

Hort. Kew. 2, v. 4, 135.

BRIZA MAXIMA.

LARGE QUAKING-GRASS.

Class.
TRIANDRIA.

Order.
DIGYNIA.

Natural Order.
GRAMINEÆ.

Native of	Height.	Flowers in	Duration.	Cultivated
S. Europe.	18 inches.	June, Aug.	Annual.	in 1633.

No. 382.

This generic name is from the Greek BRIZO, to nod. Maxima, from the Latin, signifying greatest.

The chief gratification which is offered by the Briza maxima, is not by display in the garden. It is not, however, unacceptable. It tenders its services through the dreariness of winter, to yield us consolation when its showy companions have sunk into oblivion. It should be gathered as soon as full-grown, and set up loosely in a flower stand to dry. It will then retain its elegance and its action, and form a highly-desirable accompaniment to the gnaphalium, xeranthemum, elichrysum, and other dry flowers, in constituting an everlasting or winter nosegay.

Ingenious ladies who love to surpass their friends, in beautiful floral productions, may excite surprise by exhibiting extraordinary quaking-grass. Let them take several spikelets of it, and draw out one third of their length, from their small ends; the remainder of each may be readily united to form gigantic specimens; and the trick may bid defiance to detection.

The seed of this annual should be sown as soon as ripe, in a rich warm border. Spring-sown plants will be less luxuriant.

Hort. Kew. 2, v. 1, 159.

BER'BERIS VULGA'RIS.

COMMON BARBERRY.

Class.
HEXANDRIA.

Order.
MONOGYNIA.

Natural Order.
BERBERIDEÆ.

Native of	Height.	Flowers in	Duration.	Inhabits
England.	9 feet.	April, May.	Perennial.	Bush. places.

No. 383.

The name of this deciduous shrub is of Arabic origin, and signifies wild. Vulgaris, from the Latin, common.

The Barberry forms a spiny bush or tree, that is most attractive when decorated with its beautiful coral-like fruit, which is well-known in confections and condiments.

As a wild shrub, in fences, it would doubtless, be far more abundant, but for the injurious influence it has on crops of grain, particularly on wheat, growing near it. This fact was long combated as chimerical and delusive, but the observations of honest witnesses ultimately established it beyond doubt. A blight was known to spread from the Barberry bush, as though the pure breeze that swept its leaves became contaminated, and wafted destruction before it.

It was left for the science of botany to explain the cause. The leaves of the Barberry are now known to be infested by a minute fungus, which is analogous to one found on wheat, that forms a species of the disease called red-gum. This fungus being dispersed from the shrub, is propagated amongst the corn, and unproductiveness is the consequence.

A speculation of more interest, to many of our enquiring readers, will be found in the singular irritability of the stamens of the Barberry. The stamens of Parnassia palustris, we have shown to possess a voluntary action. Those of Lopezia coronata, a mechanical one. But the stamens of the Barberry have a direct irritability, which is excitable almost at pleasure. The six stamens, which surround the pistil, in the centre of the flower, will be observed to lie back underneath the curved summit of the petals, as under a canopy. If, with a pin or other sharp instrument, one of these be touched at its base, near the pistil, it will instantly spring forward, with a quick motion, to the pistil. The same may be effected on each of the stamens separately. In a short time they will resume their wonted repose, when the experiment may be repeated.

If there be any who are insensible to the continual evidence of omniscient care, which meets us wherever we turn, instances like this must surely amaze their apathy. Here the anthers claim protection of the petals; but in such situation their farina could not, with certainty, meet the stigma, or summit of the pistil; therefore, the stamens are made capable of motion. Depositories of nectar are placed at their base, inviting insects to sip its sweets, by doing which they fulfil the design of providence. They irritate the filaments, which carry forward the anthers with a jerk, their farina is scattered, the flower fertilized, the seed becomes perfected, and the means of propagation secured.

We hope to resume these enquiries under a newly-introduced, sweet-fruited, species of Barberry.

Hort. Kew: 2, v. 2, 313.

BOUVAR'DIA TRIPHYL'LA.

THREE-LEAVED BOUVARDIA.

Class.
TETRANDRIA.

Order.
MONOGYNIA.

Natural Order.
RUBIACEÆ.

Native of	Height.	Flowers in	Duration	Introduced
Mexico.	15 inches.	May, Sep.	Perennial.	in 1794.

No. 384.

This genus was named in honour of Dr. Bouvard, superintendent of the royal garden of Paris. The propriety of the term triphylla, three-leaved, will be rendered evident by an inspection of the figure of the plant. It has also been called Houstonia coccinea.

The Bouvardia triphylla, from the brilliancy of its colours, and general gaiety of aspect, becomes a most desirable plant for the borders. Its flowers are often erect, as shown in our representation, but more usually they assume a partially pendant position. This varies with the progress of their flowering.

This plant will not bear the full inclemency of our winters. In September it should be taken up from the borders, with a portion of undisturbed soil about its roots, and potted. After having been well watered, it may be placed in the shade, or if in flower, it may constitute an ornament for the hall or other situation requiring it. During winter it may be kept in the cold frame or other place of protection. In April the roots should be repotted, forwarded in a hotbed of moderate temperature, and then again planted in the borders. Cuttings of the roots will grow, by being planted in a fresh hotbed.

Hort. Kew. 2, v. 1, 245.

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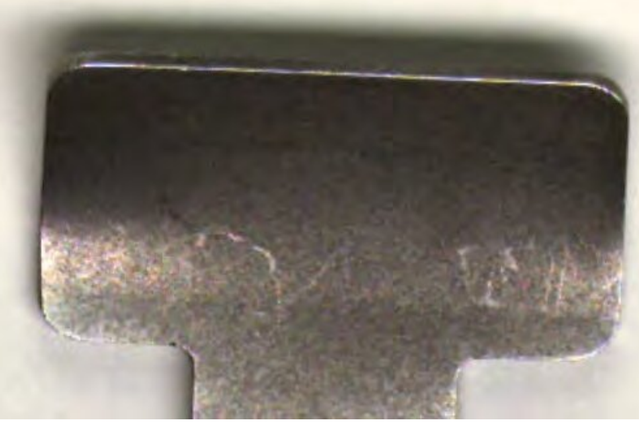

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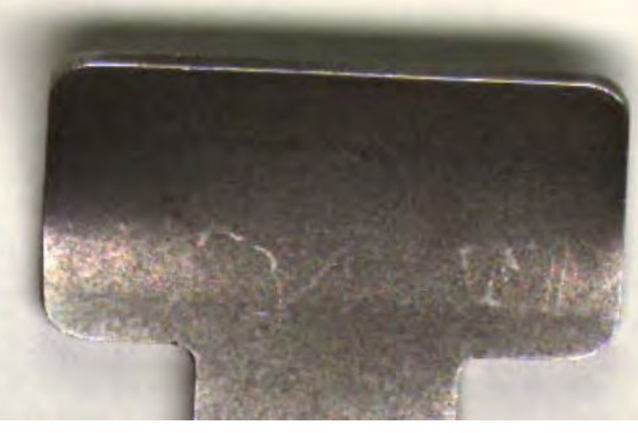

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